

THE NATIONAL WOOL GROWER

VOL. V.

APRIL, 1915

NUMBER 4

Lamb Feeding In Northern Colorado

By ROSCOE WOOD

ONE of the greatest factories for producing fat lamb and mutton in the world is undoubtedly what is known as the Fort Collins district. Perhaps it might be more properly called one great assembly of small factories in which each farm which feeds and fattens sheep or lambs constitutes an integral part. And yet these alone would fail to combine into the one great whole without some of the parts which have an essential work to perform in maintaining and developing this industry which is highly concentrated and at the same time far-reaching in its scope. For many men beside those actually engaged in the putting of the hay and the corn before the lamb or the old ewe are dependent upon the business as a means of livelihood, and perchance seek from it a competency.

The magnitude and the importance of the feedlots of this section may be somewhat appreciated when one considers that the sheep and lamb markets at all the Missouri River marts and Chicago are strongly influenced for practically a third of the year by the supply of their products. Based on alfalfa it is the leading industry of this valley. It is said that this last year the per capita returns of the people here were the greatest of any like area in the country. It is not reasonable to suppose that lambfeeding did not contribute its share to this result. That it has not always proved profitable is corroborated by many experienced feeders. That it has been a fruitful source of substantial wealth is evidenced by the fertility of the lands and the prosperity of the people.

From off the steep eastern slopes of the Rocky Mountains in northern Colorado run many small streams and with the melting of the snows in springtime carry large volumes of water. Largest and most important of these is Poudre. Close to the foothills its source wends through a fertile bottom for fifty to sixty miles, bending out to the eastward to a probable extreme of thirty miles and then in again to much narrower limits. On the eastern side the main city is Greeley, on the

Profitable crops were harvested from this virgin soil for several years. Continuous grain cropping, however, in which wheat was the principal product soon made its effects upon the land apparent by rapidly decreasing yields. Alfalfa was introduced in a small way, but was given little consideration until one farmer plowed up a piece of it and sowed to wheat. When he reaped a record crop his neighbors sat up and took notice. The popularity of alfalfa was insured right then, and farmers could not sow it fast enough. Today over half the acreage of this district is alfalfa. Great crops of hay were produced. The demand was soon oversupplied. Cattle from the adjacent mountain ranges were brought down and fed during the winter. A few fed hay through the winter and then sent their steers on east to finish the fattening process. Supply still kept ahead of demand, and good hay sold at \$2.50 to \$3. a ton.

It was the late fall of 1889 that saw the accidental inception of lambfeeding in the Fort Collins country.

There was a firm, Bennett

Bros., one of whom is still living in Fort Collins and still interested in feeding, who had been feeding sheep in Nebraska for several years. This fall they had bought 1,200 lambs down near Walsenburg, which is about 250 miles south of Fort Collins, and were bunching them in preparation for shipment to their Nebraska feedlots when a big blizzard hit them, and prevented any movement whatever for two weeks. Anent this bunching, it might be interesting to learn that in those days buyers went



IMPORTED DORSET HORN RAM, WEIGHT 268 POUNDS

western a little north of the center it is Fort Collins. In the days of the prairie schooner soldiers were stationed here to convey the emigrants through the rough mountain passes as well as to protect the stage lines. The rich level lands invited settlement, and in the early '70s ditches began to divert the water across the land. Succeeding years have seen gradual extension of these ditches and the establishment of reservoirs for the storage of the spring flood waters for use during the entire season.

to a herd and picked out just what they wanted and left the rest. They did not buy a whole crop of lambs as now, but selected a few of the tops from the various herds in a locality and bunched them before they made a shipment.

Four years before, this firm had bought a farm near Fort Collins. When the lambs began to die down at Walsenburg the brother there communicated with the one at Collins, hay was bought, arrangements made to ship the lambs there, and as soon as weather conditions would permit, it was the intention to reship to Nebraska. Loaded in coal cars doubled-decked by the shippers, for stock cars could not be obtained, the lambs came to Collins and went to the farm. They ate alfalfa hay, and immediately it was seen they were gaining. Corn was shipped in at a cost of 60 cents a hundred, and instead of sending to Nebraska the lambs were fed where they were. In December 1,200 more were brought to the same place.

Along in February two cars were sorted off the tops and sent to Chicago. Their appearance did not meet with much such reception as do Colorado lambs now. Beside lambs fed on corn and prairie hay from Nebraska, they looked paunchy, while nothing was known of their dressing ability. Finally Swift bought them at five cents a pound. They weighed right around 70 pounds. About a month later another shipment was made, when the same buyer was eager to take them at \$5.60, with a little more weight. That these were likewise good killers must be inferred from the fact that three weeks later a third shipment brought \$6.05, from the same buyer, and the tailends when marketed commanded \$6.40 per cwt. The original cost was \$1 a head.

For a few years headway was made slowly in that others in this section sought to feed lambs. The skeptical watched and waited, and it was near ten years before the industry assumed importance. But there was a neighbor farmer who watched but only waited long enough to be convinced that he could improve on this pioneer

work. Two years later marks the entrance of W. A. Drake into the industry in which he has now for many years held a commanding position. He is today the largest individual feeder in the district, which probably means also of this country. It is also very doubtful if there is a man in the United States who has handled and fed as many sheep and lambs in the aggregate as he has. A record of 100,000 head annually for the last twenty-four years stands without a parallel so far as is known. He is still very much in the business, and that he has prospered is evidenced by his rich farms, his full feedlots, and his palatial home.

Here it might not be amiss to relate that one time when Drake was playing the game to the limit an old-time big feeder and operator sagely advised him to quit, assuring him that he would surely go broke if he stayed with it. That had been the history of every feeder who had handled such numbers, and not one man had ever been able to stand the financial strain for twenty years. Yet Drake has passed that limit and is still at it, although he himself admits that he is letting up, but the fascination of the game seems to hold him firmly. Seldom is it that a man of his strength, physical and mental, of his initiative and tenacity of purpose, of his ability in achieving success in his chosen calling, can deliberately withdraw entirely from the activity of life which has been his very meat and drink for many years and be content to while away his time in the pursuit of what some people miscall pleasure. He has many of the good things of life, but it seems as if there is nothing that gives him more pleasure than to watch the lamb market when he has a goodly number in his feedlots, especially if it be going up.

Such men as Drake achieve their position as leaders through steady, determined, intelligent, persistent effort aided by their natural ability. His success has been continuous and consistent, nothing of the meteoric character in it. Neither has it been unmixed with reverses. He has had dark days. In one year his operations lost him

forty thousands dollars. Nothing very cheerful about that. But he is no quitter. It is the man "that stays" with any business who ultimately succeeds best.

His method of handling sheep and lambs in the feedlot is probably as advanced and as representative as any in the district. There are variations from it which we will note, but his results have demonstrated that he is not far from the best ways yet evolved. He handles both northern and southern lambs in varying numbers according to the conditions in the producing sections. Some years he buys the bulk of his raw material down in southern Colorado and New Mexico, others he goes to Wyoming and Montana for his supplies. This last fall he bought about two-thirds of his stuff in the north. Comparing the lambs from the two sections he considers the north-erns to be the more profitable and that they make better gains from the same amount of feed, while the southerners generally outsell the others because of their light weight and high dressing qualities. In spite of this preference, however, his own experience has shown the greatest profit from a bunch of southerners which had been bought right and happened to hit a high market.

The lambs are generally put in the feedlot some time during the month of November, and fed from three to five months, depending upon the character of the lambs, the gains they make, and the actions of the market. They are bought on the range, at so much per pound weighed at the loading station after twelve hour shrink. He generally contracts these lambs in the summer for fall delivery and they must weigh a certain minimum, the price being governed by the weight. Lambs weighing less than fifty pounds are not considered worth as much per pound.

When they come to the feedlot they are started on barley for the grain ration which is continued until they are well used to eating grain, when corn is substituted for the barley, the change

being made in about a week or ten days. Barley is used because it is a common product of the farms in this district, is not high in price, and is obtainable at the season when new corn is hardly on the market and old corn is high in price. The corn is fed morning and evening, at the rate of one-half pound per head per day at the beginning, which is quickly raised to a pound, and if a short feed is intended it is increased to $1\frac{1}{2}$ and even to $1\frac{3}{4}$ pounds. Grain is fed in reversible grain troughs so made that by simply tipping over the trough is always clean and free from all dirt, frost or snow. The troughs are in a yard used for this purpose only and accommodate about 600 to 700 head at a feeding.

When a bunch goes to grain the hay racks are filled with alfalfa. These are known as the selffeeding rack, as they are kept filled with hay, and the lambs pull down the clean fresh hay as fast as they want it. They are set upon a cement foundation and so arranged as to form the dividing partitions between the lots. The lots are rectangular in form, with cement water troughs between each lot, a trough two feet wide and sixteen feet long being used. Water is supplied from wells pumped by windmills or gasoline engines. Only rarely are spring or running streams accessible for this purpose. Another popular method for feeding hay and which was the first used is the panel way. With this the hay must be pushed up to the rack two or three times a day, the lambs reaching through over it. Thus there is some mussing and soiling of hay and resulting wastage. The panel method is cheaper and less substantial, but the added cost of the selffeeder is offset by the less wastage and less labor expense. The illustrations of the two methods is shown in the accompanying photos, as well as the standards for the grain troughs.

The investment in equipment for a feedlot is very small. The racks or panels, the grain troughs, and water are the main essentials. No shelter is required in the form of sheds in this

climate. Experience has proven that the lambs do better without any cover, being hardier, eating better, and making bigger gains. A windbreak of tight board fencing on the north and west sides of the lot are sufficient and many do not even have this. The size of the lot is sufficient to give whatever number is desired ample room to eat and lie down. Rack room is estimated on a basis of one foot per lamb with panels, while half of this is enough for the selffeeder. As all storms are of snow the only evil that results is a wet yard under foot, and this is remedied by putting in plenty of straw, which also adds much to the manurial value. In fact some feeders work their straw into manure by this method, bedding their yards regularly regardless of weather conditions. This is the best known way of securing a maximum amount of the best fertilizer.

(To Be Continued in the May Issue)

DEATH CAMAS.

(*Zygadenus venenosus*.)

Names.—This plant is also known as poison camas, poison sego lilly, mystery-grass, wild onion, and lobelia, but none of these names are properly applied to it. Squirrel-food and hog potato are additional local names.

Description.—Death camas is an erect herb, one to two feet high, with slender grass-like leaves from near the base and bearing later in the season a terminal oblong cluster of small white flowers. It grows from a roundish bulb one-half to one and one-half inches thick, covered with thin brown coats; although similar in appearance to that of the wild onion, this bulb lacks the peculiar onion odor. The lower leaves are six to sixteen inches long by less than one-half inch wide, parallel-veined, and often mistaken for grass leaves but without the ligule and joint which in all grasses mark the junction between blade and sheath. The individual flowers, scarcely over one-eighth inch across, are borne on short branches of the cluster, the sepals and petals are three each and similar;

there are six protruding stamens, and a three-celled ovary which matures into a three-lobed seed-pod.

The true camas, or quamash (*Camassia quamash* and *C. Leichtlinii*), the bulbs of which are eaten by the Indians, is readily distinguished from death camas by its larger bulb and larger blue flowers. It grows in very wet places, especially in the mountains.

Distribution and habitat.—This plant grows in all of the Pacific States and is especially plentiful in the northern part of California. In the middle and southern parts of the state it is restricted to the mountain meadows and



DEATH CAMAS

even there it is seldom sufficiently plentiful to constitute a menace.

Of special interest to stockmen is the fact that death camas is very exacting in the matter of soil and moisture, so that one familiar with its requirements can predict almost to a certainty whether or not it will be found in a given meadow the conditions of which are known. It always grows in moist soils, but never in marshy or wet places. In dry meadows it is therefore restricted to the swales and ravines, in wet meadows to the higher and better drained portions but it never grows along the dry meadow borders.

Aside from meadows, the plants are often found along depressions in the hills where the moisture is near the surface but these belts are usually too narrow to be of much importance.

Poisonous Characters.—All parts of the plant are poisonous to sheep but the leaves cause the most trouble since they are eaten along with grass during spring months. The bulbs are dangerous only after rains, since at other times it is almost impossible for sheep to pull them out of the ground. The seeds are said to produce poisoning when the mature plants are cut and fed with hay from natural meadows. Hogs are seldom if ever poisoned by death camas but on the contrary seem to thrive on it; this has given to the bulbs the name of "hog potato." So far as we have been able to learn, horses and cows universally refuse to eat death camas.

Symptoms.—The symptoms are remarkably uniform and characteristic so that stockmen should be able to recognize cases of poisoning by this plant. According to Chesnut and Wilcox, the first signs of poisoning are a certain uneasiness and irregularity in the movements of the sheep. As these symptoms become more pronounced they are accompanied by spasm and rapid breathing. An increased flow of saliva and regurgitation through the mouth and nostrils nearly always take place. The latter symptoms include complete motor paralysis, combined with exceedingly rapid and shallow breathing and a frequent weak pulse. Death may ensue in from one to twelve hours, depending upon the amount eaten. It often happens that a sheep will become paralyzed and he lies quietly on its side for some hours, after which it will slowly recover, but there is little hope for an animal that has been down for twenty-four hours or longer. The lungs become much congested and while the brain may also show slight congestion it has no lesions.

Remedies.—Permanganate of potash and aluminum sulfate administered as described on page 220 has been recommended as an effective antidote in

cases of poisoning by death camas. Chestnut also suggests, as an equally good remedy, caffein diuretin, given hypodermically or even through the mouth. Caffein diuretin is not carried in stock by most druggists but could be ordered in advance by stockmen where animals are likely to be subject to poisoning by death camas. This remedy is not so easily administered as permanganate of potash.

Preventive measures.—The first step to be taken in prevention is to become thoroughly acquainted with the plant, in order that it may be distinguished from harmless species. Its habit of lurking in the meadows where it is eaten along with grasses makes its recognition by stockmen a matter of prime importance. During the flowering period it may be known at a glance by the characteristic cluster of white flowers but its leaves so closely simulate those of certain grasses that it is not so easily detected in its younger stages. However, the entire absence of ligule and joint between blade and sheath is a reliable distinguishing character since these are present in all grass leaves. In case of doubt the underground parts should be examined. No California grass grows from true bulbs. Other members of the lily family might be mistaken for death camas but not many of them grow in meadows, except certain species of *Brodiaea* and these may be distinguished by the solid "bulb" without concentric layers.

Eradication of death camas from the range is rarely practicable. Where it grows at all the plants are usually so numerous and their uprooting so laborious that this method is far too expensive. Eradication is feasible only where the species grows in narrow strips, as along shallow ravines in the mountains.

A better policy and one which is more generally followed is to fence or herd stock away from infested areas until all danger of poisoning is over. The most dangerous period is in the early spring when the grass is beginning to grow. The death camas sends up its leaves somewhat ahead of the

grass but they also dry up and become harmless before the grass fully matures. Before admitting animals to pastures where the plant grows one should make a careful examination to see that no considerable number of the plants are still in a green or growing condition.

In the valley meadows of northern California and in Owens valley the plants have usually passed their dangerous condition by the first or middle of July. On the mountain ranges it may be as late as August, in southern California as early as June. But it must be remembered that the date of maturity will vary with season as well as with altitude, slope, etc., and that the condition of the plants can therefore be determined only by a personal examination.

Bulletin 249, California Station.

PROSPECTS GOOD IN OREGON.

Everything is going good here now, weather has been fine for winter lambing, and good percentage has been made. Grass is coming along fine, quite a lot of moisture has fallen this spring and the ground is wet. Some wool has sold here from 20 cents up, and some below that figure. Sheep sales have been very good, Mr. R. N. Stanfield has bought from Mr. Hiles Lee, of Baker, Ore. 7,000 ewes at \$7 per head, delivery has been made. Lambs are being contracted at as high a price as \$4 per head delivered at option of buyer.

The great trouble here now is the range, the homesteader has taken the water supply and the range left is hard for the sheepmen to handle without water facilities. This naturally will bring higher prices for sheep or they will have to quite the business, for they will now be forced to buy water along with the outside range. I hope to go on the road this next month and get your subscription list increased. With best wishes to the National Wool Grower.

Baker Co., Ore. J. G. HOKE.

Please get us a subscriber.

Should Fattening Lambs Be Sheared

By PROF. W. C. COFFEY.

MANY believe in shearing lambs just before or soon after they are placed on feed because they think they eat more, gain faster and make more economical use of their feed than if left in the wool. A few years ago the Illinois Experiment Station conducted an experiment which was based on this question. Sixty lambs, divided into three lots of twenty each, were shorn March 19 and compared with sixty similar lambs likewise divided into three lots and shorn May 21st.

From the following table, which shows the feed consumed, gain and yield of wool per lamb, it is evident that there was no advantage in shearing early because the lambs shorn on March 19 ate a little more and gained slightly less than those shorn on May 21. Perhaps environmental conditions were somewhat against the shorn lambs. Since, all the lambs in the experiment were confined in small lots with twenty lambs in each, the shorn lambs may have been more uncomfortable in cold weather than they would have been had a large number been together as is usual-

ly the case under ordinary feeding conditions. But the shelter was fairly warm and it seemed to us that the shorn lambs had as good a chance as the average farm feeder could have given them.

But in order to make sure on this point the writer has been conducting another test on shorn and unshorn lambs. This time the shorn lambs were housed where unquestionably they had every advantage for being comfortable except the application of artificial heat. So far the unshorn lambs have made the better gains on

a smaller consumption of feed as the following figures show.

Feeding period 98 days, December 5 to March 6—ten lambs in each lot. Results stated in pound per lamb.

Grain Silage Alfalfa Gain

Lot 1—In	hay		
the fleece...	133.6	34	136.2 24.3
Lot 2—			
Shorn	133.6	34	142.6 23.2

The lambs in this experiment were out of western ewes and by South-down sires. Since they were in choice condition at the beginning of the test, the rate of gain was lower than would

be expected of feeder lambs.

Because of the results in feed consumed and gains made in the experiments reviewed above the writer is becoming somewhat skeptical as to the advantages of early shearing. A comparison of the yields of wool further augments this skepticism, for the fleeces of the lambs shorn on May 21 averaged 2 1/3 pounds per head more than of those shorn on March 19. The difference in the weight of wool returned was not determined on scoured basis, but if such a determination had been made we are certain that the results

would have been in favor of the late shorn lambs because they had 63 more days of liberal feeding in which to grow wool than the lambs shorn on March 19. Beyond a doubt the lambs shorn late had more yolk in their wool than the other lambs, for they lived through several very warm days before May 21, but their wool was longer and apparently had more life in it than that from the early shorn lambs. If there was any difference in grease value dealers could not see it, as the two lots of wool sold at 25 cents per pound. This gave the late shorn



LOT 5 AT TIME OF MARKETING.

(Feeding period 98 days, Feb. 19 to May 27. Twenty wether lambs in each lot. Approximate initial weight, 65 pounds).

	Date of shearing	Proportion of corn to hay	Total shelled corn per lamb	Total alfalfa hay per lamb	Total gain per lamb	Wool per lamb
Fed alike:			lbs.	lbs.	lbs.	lbs.
Lot 1.....	May 21	1 : 0.86	133.5	114.7	32.45	8.75
Lot 4.....	March 19	1 : 0.85	136.8	117.0	32.15	6.30
Fed alike:						
Lot 2.....	May 21	1 : 1.31	111.6	146.2	31.35	8.40
Lot 5.....	March 19	1 : 1.31	113.1	147.8	30.30	6.40
Fed alike:						
Lot 3.....	May 21	1 : 2.03	86.2	174.9	28.85	8.60
Lot 6.....	March 19	1 : 2.03	86.7	176.2	28.97	5.85

Note—One of the lambs of Lot 6, Experiment No. 2, died during the second period, making the average number of lambs during that period 19.36, and during the third period, 19.

lambs an advantage of 58 cents per head over the others. Both groups of lambs were valued at the same price at the market. Buyers admitted that the early shorn lambs had more wool than the late shorn lambs, but not enough more to affect market value. At the close of the experiment the early shorn lambs weighed approximately 2 pounds more per head (Lot 6 omitted) than the others. From the standpoint of mutton this, at 8 cents per pound, would give them an advantage of 16 cents per head over the late shorn lambs. By subtracting this 16 cents from the 58 cents gained by the late shorn lambs in wool product we have 42 cents, the amount the early shorn lambs would have had to make

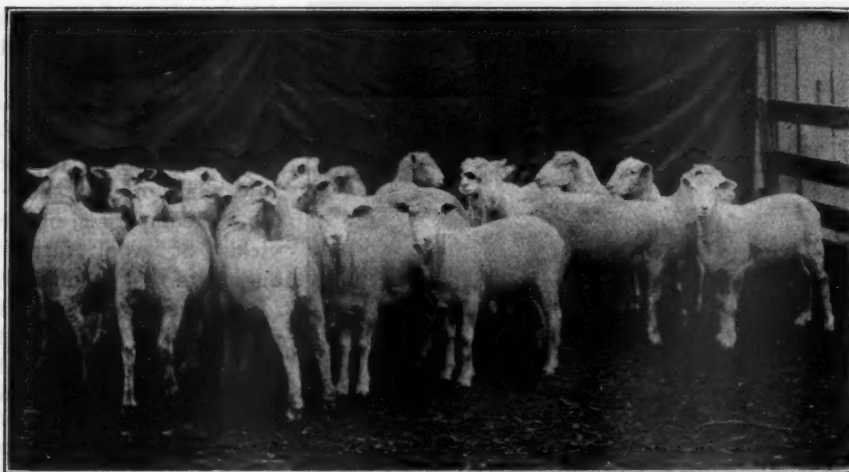
There are times when the feeder knows he can secure a good price for his wool if he removes it at once. With the uncertainty of future prices which is not at all uncommon in the wool market he perhaps acts wisely by proceeding to shear early in the feeding period. Again more lambs can feed comfortably in a given space if they are shorn. When the feeder is short of space and long on both lambs and feed it may pay to shear. Should lambs when purchased be badly infested with ticks and the weather too cold to permit of them being dipped without danger of serious injury, it is the best policy to shear, providing good shelter is available. Should they have an unusual quantity of burs or other vegetable materials

feeding period provided the lambs are normal and there are no peculiar kinks in market conditions.

As a rule lamb feeding is conducted in winter in regions where winter weather is likely to be cold but variable with respect to temperature and moisture. Now we all believe that our domestic sheep have descended from wild progenitors which inhabited high, cold, treeless, wind-swept plains. We think these wild ancestors were covered with a thick coating of wool and hair and we believe that this coating was a big factor in enabling them to survive under rigorous conditions. Although we have bred much more wool onto our domestic sheep than their ancestors in the wild had, we nevertheless regard their fleeces necessary as a protection against untoward weather conditions. For example, we see how the Merino with its oily, dense, short fleece covering the entire body is protected against variations in cold and moisture more than a sheep with a comparatively open and dry fleece. We see this because we know that wool is a non-conductor of heat and that a dense oily fleece will keep water from the skin.

From the foregoing we realize that it is rather difficult to construct a shelter which will protect a lamb from variations in temperature quite as well as its natural covering. And, if a feeder has a barn in which shorn lambs make a greater gain from a given amount of feed than unshorn lambs, it may be worth while to question whether the barn is constructed as it should be with respect to ventilation, etc. A shelter which protects from winter rains only, can be constructed much more cheaply than one designed to protect against both rain and cold. Hence, the feeder who insists upon shearing early may have a much larger over-head charge resulting from building equipment than the one who does not.

Before closing this discussion we wish to say that there are feeders who believe in shearing late rather than early. They believe as they do because their experience coincides with the results of the experiments reviewed



LOT 2 AT TIME OF MARKETING.

in gains to overcome the advantage which the late shorn lambs had in their greater wool product. Suppose that each pound of gain cost 5 cents and sold for 8 cents. Then the early shorn lambs would have had to gain 14 pounds per head more than they did to equal the net returns from the late shorn lambs. Such was practically an impossibility and if the margin between cost and selling price of gains should become less the situation would become still worse for the early shorn lambs.

In spite of experimental figures to the contrary, there must be good reasons under certain conditions at least, for shearing fattening lambs early.

in their wool, it is often advisable to shear them as early as possible in order to keep these materials from irritating and penetrating the skin, thus forming pus pockets in the flesh, which is almost sure to cause the carcass to be condemned.

None of the reasons given above in favor of early shearing have much to do with the fundamental questions of economical gains and desirable market finish. In fact, they have nothing at all to do with these questions except as they may deal with unusual conditions, detrimental or otherwise. If we engage in a little meditation on the fitness of things we can find no good reason for shearing early in the usual

ed in this article. These feeders, however, often shear before marketing their lambs, but they wait until late in May or early in June, after which there is little likelihood of cold, backward weather. This is a little past the normal time of shearing in regions where much feeding is done hence relieving a lamb almost ready for market of his fleece is the very opposite of distressing. And it is at this time that shearing seems markedly to stimulate the production of gains as enormous increases in weight have been recorded in periods of from seven to fifteen days following the shearing process.

When wool is high in price and mutton is comparatively cheap it usually pays to shear before sending lambs to market. If wool is low or if both wool and lambs are abnormally high it may be best not to shear at all. If all conditions are normal and if it is advisable to shear, the writer would not set the shearers to work until near the close of the feeding period. No less gain for feed consumed and more pounds of wool which is worth more pound for pound than mutton are his reasons for late shearing.

SHEEP AFFAIRS IN WESTERN CANADA

Alberta, Canada, March 19.—The South Alberta Wool Growers' Association, the strongest sheepman's organization in Canada, assembled in annual convention in Lethbridge today.

Many topics of live interest were considered. The sheep industry in southern Alberta was given a severe blow, when it was announced by the head of the Forestry Branch for the Province, that permits for the summer ranging of sheep in the Livingstone Valley Forest Reserve, would no longer be issued, unless the sheep were transported by rail from the prairies.

A petition signed by farmers in the vicinity of the reserve, who objected to the trailing of sheep across or near their land, turned the trick, and unless the Dominion Government offers some alternative proposition, the range will

be useless, as any sheepman knows that ewes and lambs cannot be loaded into cars and shipped without the entailment of considerable loss from the attendant jostling and confusion, resulting in motherless lambs and great loss.

The sheepmen were of the opinion the "damage" referred to in the petition, was the result of imagination on the part of some homesteader. No damage had been reported to the sheepmen while crossing the country, and no damage actions had resulted.

The Livingstone Valley is one of the finest sheep ranges in America, and feed sufficient to summer two or three hundred thousand head is available. The action of the department was taken before the sheepmen's side of the story was heard.

The range was only opened last summer, after five years of coaxing on the part of the wool growers.

Ray Knight is president of the Association, and it is his opinion that unless the government offers some alternative, there will not be a sheep in the valley this summer, and that a number of the sheepmen will be forced out of business for lack of summer range.

Sheepmen here are determined to hold for 30 cent wool.

C. M. McLENNAN,
Alberta, Canada.

TO BREED CORRIEDALES.

Mr. F. S. King, of Laramie, Wyoming, last year visited New Zealand and inspected the Corriedale sheep in their native land. After going over the matter most thoroughly Mr. King is satisfied that there is an important field for the Corriedale in this country. So satisfied is he with the merits of this breed that he has organized the Wyoming Corriedale Company and will engage in importing and breeding Corriedales in this country. An importation of Corriedales for the new company will soon land in the United States. Mr. King has arranged to make several importations during the summer and will fill all orders that

he receives. We are advised that already he has orders to import about 300 head.

AROUND CASPER, WYOMING.

Range conditions in North-Central Wyoming were better last fall than they have been for years, but the feed has all been used up by this time, and this range will not carry any more sheep than are now on it. The sheep are in good shape and have a clean, well grown stapled wool. There are no ewes for sale in this section, nor are any new men going into the sheep business.

The papers are all stating big prices for wool but wool buyers are holding prices as low as they can. There has been no wool contracted around Casper yet as the growers are holding the prices away above that offered by the dealers.

We have had a good winter, in some parts much snow, but no cold weather at all, and the sheepmen are all in good condition.

CARL BAYER, Wyoming.

AROUND SAGUACHE COUNTY, COLORADO

The situation in the sheep industry here is the best I have ever seen it. Sheep are in better condition than usual, principally owing to the fact that the owners are feeding more than they ever have done before. The winter was not hard and the range is in good condition, sheep are fat, with the possible exception of a few herds, where the owners were too stingy to feed. There is no sheep here for sale. No new men going into the business for the reason that they can't buy any sheep with a range right, there is no room on our ranges for any more sheep.

We have been offered 25c for our wool, but none contracted yet that I know of. The outlook here for wool and the sheep industry generally is the best that we have ever seen.

T. M. ALEXANDER,
Colorado.

PROTEST AGAINST THE ADVANCES IN RAILROAD RATES ON LIVE STOCK.

The American National Live Stock Association, in convention assembled, at San Francisco, California, March 24, 25 and 26, 1915, hereby declares that:

WHEREAS, The railroads in the live stock raising districts, both in the range country and in the corn belt, have made material advances in the rates on live stock by tariffs which they have filed with the Interstate Commerce Commission, and these advances in the rates have made them higher generally than they have ever been before, and in most instances are advances of rates which the Interstate Commerce Commission have prescribed, after full hearing as provided by law; and,

WHEREAS, Such advances in the rates are above the rates which were in effect on January 1, 1910, and under the law in such cases the burden of proof was placed upon the railroads to justify such advances and the justification which the railroads are claiming for these advances in the rates is the fact that railroad earnings have declined because of falling off of the volume of traffic and earnings of the railroads generally, due to the depressed conditions of business arising from various causes, beginning before the European War and being materially intensified since that date; and,

WHEREAS, This depression in business of the railroads is one which is common to the country with its consequent effect on the volume of business and profits in all lines of industry; and,

WHEREAS, With respect to live stock traffic it is admitted by the railroads that they do not know and do not pretend to show what profit they make, or at any previous time did make per carload on live stock; and,

WHEREAS, We believe that rates cannot be based on such abnormal conditions as have existed for two years during which the depression in

general business and railroad traffic has prevailed; and,

WHEREAS, We believe that the rates on live stock which were in existence at the time these advances were made are amply sufficient to afford reasonable compensation for the service; and,

WHEREAS, We believe that they still afford reasonable compensation for the service performed, having been made by the Interstate Commerce Commission or freely prescribed by the railroads themselves; and,

WHEREAS, This Association, and other live stock Associations, and the railroad commissions of a number of western states protested against these advances in the rates, and the Interstate Commerce Commission suspended the tariffs pending investigation, which is now going on before the Commission; therefore, be it

RESOLVED, By the AMERICAN NATIONAL LIVE STOCK ASSOCIATION THAT, It is the sense of this Association that the advances in said rates are not justified and that the same ought not to be permitted; and be it further,

RESOLVED, That it is the sense of this Association that rates should not be advanced on live stock because of any temporary depressed condition of business and falling off of the traffic and earnings generally on that account; and be it further

RESOLVED, That we ask of the Interstate Commerce Commission a thorough and careful investigation with respect to the reasonableness of these advances in rates and of the rates themselves, taking into consideration the fact of the necessity of the development of the country by the encouragement of stock raising, feeding and meat production, and that the Commission should not permit such advances unless it is shown by the railroads that the profits from live stock shipments do not afford a fair remuneration of the service performed; and further that we protest against the burden of the loss which the railroads may have sustained by the falling off of their traffic and earnings in other lines

being cast upon the live stock producer; and, be it further

RESOLVED, That this Association make all such defense against the advance in said rates as may seem necessary.

THINGS FINE IN NEW MEXICO.

New Mexico has had one of the best winters from a stockman's point of view that it has had for years. The winter has been mild with plenty of rain and snow. And this kind of a winter following a most excellent summer has left all stock in fine condition.

The ewes were all in good shape at bucking time and having wintered well an exceptional good lamb crop is expected. Several sheep men have informed us that they have had little or no loss to date. I don't think the range loss this year will run over 5 per cent.

There are few, if any, breeding ewes offered for sale and these at fancy prices. Nearly all the ewes that have been sold in this country have gone to Arizona and California, the owners going out of sheep and into cattle. This on account of being able to buy or lease state land and other range conditions. No new men going into the business on any large scale.

The outlook for the sheep business, however, is very good with good wool prices in sight and prospects for a big lambing and good prices for the lamb crop.

CHAS. CHADWICK & CO.,
New Mexico.

RANGE TO LEASE.

We are advised that the Sopris range located from Aspen to Sellar, Colorado, is for lease from July 1st to October 20th, and that this range will handle about 60,000 sheep. The Holy Cross range near Glenwood, Colorado, is also for lease to handle 10,000 head of sheep. The Leadville range from Norrie east is also for lease to handle 15,000 sheep. Inquires for this range may be made to the Colorado and Midland Railroad Company, Salt Lake City, Utah.

Possibility of Producing More and Better Sheep by Improvement in Methods of Handling on the Range

By JAMES T. JARDINE, U. S. FOREST SERVICE.

STATISTICS of the U. S. Department of Agriculture show that in 1850 there were approximately one and a half million head of sheep, 7.6 per cent of the total number in the United States, west of the Mississippi River. Of this 7.6 per cent, 2 per cent were in the eleven far western states, and the remaining 5.6 per cent in the states east of Montana, Wyoming, Colorado and New Mexico. In 1910 there were approximately 37½ million sheep, 71.8 per cent of the total in the United States, west of the Mississippi River, and of this number approximately 30 million head, 58.7 per cent of the total in the United States, were in the eleven far western states, which had only 2 per cent of the total in 1850. It is estimated that between 1910 and 1914 the number of sheep in the eleven far western states decreased approximately 11 per cent.

It is apparent from these figures that the range sheep industry of the vast territory west of the Mississippi River grew from its beginning to its maximum development and began its decline in a little more than a half century. As a matter of fact, the main development took place during a period of approximately 40 years, from 1870 to 1910. Notwithstanding the importance of this industry and its tremendous development, little, if anything, was done prior to 1907, either by the individual states or by the National Government, in the way of investigation or study of the

situation with a view to improvement in the management of the sheep on the range or the management of the vast area of range supporting the industry. A great deal of study was devoted to the problem of the feed yard, the finishing end, but the range production end was left to shift for itself.

When the National Forests were placed under the jurisdiction of the Department of Agriculture in 1905, it was realized that the grazing resources

sentiment which was the result of the existing systems of management rather than the result of inherent objectionable characteristics of the sheep.

Studies in the Management of Sheep Under Range Conditions.

Accordingly, studies of management of sheep under range conditions were begun by the Forest Service in co-operation with the Bureau of Plant Industry in 1907. Results have been distributed from time to time in the form

of publications and addresses before livestock associations. Sheepmen generally recognize that a great deal has been accomplished in the way of eliminating prejudice against sheep, which was founded upon the bad effects of the necessary competition of range in former days. In the March issue of the National Wool Grower a summary of the results from experiments in lambing ewes on the range was published. In

the remainder of this article and in those which follow in succeeding issues, the investigations relative to the handling of sheep on National Forest range will be reviewed from their beginning to date, with the idea of placing before sheepmen just what has been accomplished and its application in the future of the range sheep industry.

Pasture Handling as Compared With the Old Herding System—Plan of Study.

In proposing any change in the existing methods of handling sheep on



SHEPHERD EQUIPPED FOR FOUR DAYS CAMPING WITH HIS SHEEP. THE PACK INCLUDES BED, WATER KEGS, COOKING UTENSILS, AND FOUR DAYS PROVISIONS. THE BURRO IS TRAINED TO STAY WITH THE SHEEP. PLUMAS NATIONAL FOREST, CALIFORNIA, 1914.

within the Reserves were of vital importance to the range stock industry. At the same time it was realized that steps would have to be taken to minimize the bad effects upon range and watersheds which had followed the great development of the range stock industry, especially the sheep industry, in the far western states from 1870 on—effects which had resulted not only in depletion of ranges and conflicts between different classes of stock, but in a well developed feeling of resentment against sheep, which was shared by all except the owners of sheep, a re-

the range, it is fully realized that the effect of such change upon the forage crop, effect upon the sheep, and its practicability from the standpoint of the sheep owner, must be kept in mind and studied. To make possible a close study of the natural habits and requirements of the sheep under range conditions and the comparative advantages and disadvantages of different systems or methods of handling both to the sheep and the range, an area of typical mountain sheep range was enclosed with a coyote-proof fence. The area selected is surrounded by approximately 30,000 acres of similar range used by five bands of sheep. For five successive seasons, 1907 to 1911, inclusive, a band of sheep was grazed within the enclosure, free from annoyance by either predatory animals or herders during the summer season. A careful study was made of the actions of the sheep, growth of sheep, loss of sheep, to some extent wool growth, carrying capacity of the range, and cost of handling under this approximately ideal system of management, and a similar study of the same points, under existing systems of herding, on the adjoining unfenced range.

Results.

As a result of these comparative studies it was found that the sheep under pasture required, on the average, no more than two-thirds of the range necessary for sheep handled under the existing systems of herding, and that notwithstanding this reduction in the amount of range used, the lambs produced under pasture during the summer grazing season of three months gained 5 to 10 pounds more than the same class of lambs handled on adjoining range under herding. A comparison of the results secured by different herders, supplemented by a study of their methods of herding, led to the further conclusion that under the most efficient herder sheep will enjoy to a great extent the quiet and freedom of pastured sheep, and as a consequence the carrying capacity of the range under such a herder may approach within 25 per cent of pasture handling.

Factors of Management Responsible for Difference in Results Under the Two Systems:

For four seasons the habits of the pastured sheep were carefully observed in comparison with the actions of the sheep on similar range under different herders, with a view to deciding what differences in management are responsible for the better results under pasture, and to find out to what extent it would be practicable to modify existing systems of herding so as to secure results to both sheep and range more nearly equal to the results under pasture. It was decided that both the increased weight of lambs and the increase in carrying capacity under pasture were due largely to a few simple differences in management. The pastured sheep were on the range all the time, grazed without worry in small bunches or well spread out, mainly in early morning or late afternoon, drifting to open spots near the tops of the ridges to bed down at night. In mid-day they usually were grazing in dense timber or "shaded-up" in the more open timber. As many as 77 bed grounds were used in a single season of three months, and at some time during the four seasons almost every open spot along the ridges and slopes was used as a bed ground. Except during the first season, when the sheep were not allowed entire freedom in bedding, the low ground next to the creeks was not once chosen as a bedding spot. Bedding under this system resulted in fertilizing, and to some extent cultivating, the rocky sterile points, and seed carried in the wool was left on the bed ground, the net result being an improvement in forage crop, fatter sheep, and cleaner wool.

In contrast to this the system under herding was to establish a camp, usually next to the creek, in some canyon, a place the sheep would never select of choice. From this camp they would drift or be driven to the range each morning and returned each evening for a period of from 4 to 20 days. While the pastured sheep were grazing on

fresh range during the cool hours of the morning, the herded sheep were either in camp or were drifting out over territory previously fouled by grazing and trampling. In the evening, when the herded sheep were drifting in over this previously used territory, the pastured sheep were doing their best grazing. As a consequence the sheep under herding were forced to graze more in the heat of the day when their natural habit would be to lie about in the shade; they were frequently disturbed by rounding up with dogs or by shouting, which could not be accomplished at best without a certain amount of annoyance that not only interfered with their grazing but interfered with the most efficient production of meat from forage consumed.

Out of it all it seemed evident that the essential fact learned from the study of sheep in pastures was that to keep them quiet on the range all the time, grazing fresh pastures as much as possible, will result in an increase of 5 to 10 pounds in the weight of the lambs, and an increase of 15 to 50 per cent in the carrying capacity of the range over what may result from the old central camp bedding system, where the sheep are close herded during the day and trailed back and forth to one camp for 4 to 20 days. It was believed that these requirements of the sheep could be met in practice on the greater portion of the Western range by modification in the existing methods of herding. Accordingly, in 1909, the following suggestions were offered, in publication, for the handling of sheep on the open range under the herding system:

"First, so far as possible sheep should be allowed natural, quiet freedom; second, they should be kept together by the herder moving continually around the outside of the band, rather than by rounding up with dogs; third, whenever practicable, they should be bedded where night overtakes them; finally, rather than graze a camp to its full capacity at one time, it should be left in good condition and grazed again later.

The success to be attained along these lines will depend upon the ability, conscientiousness, and energy of the shepherd. A man who knows nothing of the habits of sheep can not properly herd them in large bands. A man who is not conscientious will not properly herd them in large bands; and a lazy man should never be allowed to try, if anyone else can be secured."

These suggestions are simple, but to have dropped the matter with their publication would have been to throw upon the sheep owners the problem of working out actual management incorporating these principles. The For-

range under the old system of handling, and for similar sheep on adjoining range when handled according to the directions quoted above. Such tests have been carried out for two years on the Madison Forest in Montana, for three years on the Payette Forest in Idaho, and for two years on the Big-horn Forest in Wyoming, under the direction of special men who thoroughly understand both sheep and range. The difference in character of range, the modifications of the system worked out for each of these localities, and the results secured, will be presented in separate articles in succeeding issues.



SHEEP "SHADED UP" AT 10 A. M. AFTER FIVE HOURS GRAZING UNDER THE "BURRO" SYSTEM OF HERDING. THE SHEPHERD AND BURRO ARE IN CAMP NEARBY. PLUMAS NATIONAL FOREST, CALIFORNIA, 1914.

est Service, in a way, holds the dual position of "farmer" and investigator, and therefore, in order to secure the adoption of the principles advocated in the management of approximately 8,000,000 sheep on ranges within National Forests, demonstration experiments in co-operation with sheep owners were started for the purpose of showing that the change from the old methods can be made with advantage to both sheep and range. The plan was to include a comparative study of growth of sheep, loss of sheep, cost of handling, and carrying capacity of

In addition to these major tests under the direction of special men, demonstration experiments have been made by local Forest officers, in co-operation with sheepmen, on Forests in Washington, Oregon, and California. Further, the new system, variously known as the "bedding out method," "burro system," "blanket system," "tepee system," and "new system," has been successfully adopted by a few sheepmen in nearly all localities of the National Forest region.

During the season of 1913 a band of 1,221 ewes, Merino-Shropshire grade,

and 1,417 lambs sired by Hampshire rams, were handled under the new system on high, rugged, timber and park range on the Rainier Forest in Washington. It was the first attempt to adopt this system. The range is difficult to use, and a late season resulted in feed being backward. Notwithstanding these facts, an average of the lambs weighed on July 9, when they entered the high range, and again when they left the range at the close of the season of 51 days, made an average daily gain of .37 pounds, and their average weight at the close of the season was 83 pounds. It was the opinion of the investigator who reported the experiment, as well as that of sheepmen, that the new system is superior to the old, but there was some question as to its applicability on all ranges.

During the season of 1913, on the Fremont Forest in Southern Oregon, a band of 1,096 ewes and 697 lambs were herded under the new system in open, yellow pine range. Average lambs weighed at the beginning and reweighed at the close of the season, made a gain of 27.98 pounds in 98 days, an average daily gain of .286 pounds. The total loss during the 98 day season was 19 lambs and 6 ewes. The ewes were grade Rambouillet and the lambs part sired by Shropshire and part by Rambouillet rams. During the same season an adjoining range was grazed under the old method of herding, from an established central camp, by a band of 1,206 Rambouillet ewes and 790 Rambouillet lambs. Average lambs weighed at the beginning of the season and again at the close of the season made a gain of 25.05 pounds in 96 days, an average gain of .26 pounds per day. The total loss from this band was 30 lambs and 12 ewes, nearly double the loss from the band herded under the new system. The range used by the band under the old system contained 6,744 acres, and was classified as better range than the area of 4,117 acres used by the band under the new system.

During the season of 1913, on the Ochoco Forest in central Oregon, a band of 819 grade Merino ewes and

816 lambs sired by Merino rams, was herded under the new system on approximately 3,000 acres of high sheep range, of which three-fourths was timbered and one-fourth open. They were loose herded, especially so in timber. Occasionally the leaders were checked or turned in a special direction, and at other times the tail end of the herd was pushed ahead. The herder carried his blankets and slept out with his sheep 70 per cent of the time. He never lost sheep, and at the end of the season only seven were missing, and all were accounted for. During the same period a band of 785 ewes and 775 lambs of the same breed and grade as those handled under the new method were handled under the old close herding central camp system on range adjoining that used under the new system. They were looked after by a man considered to be an excellent herder, of 13 years experience herding on mountain ranges. The tendency was to close herd at all times, and especially so in timber, as the herder was afraid of losing sheep. Small bunches of sheep were lost several times during the season and found later. At the close of the season a total of 16 were missing besides those killed for mutton. In other words, the loss under the old system, as on the Fremont Forest, was approximately double the loss under the new system. The weights taken were of no value, as the same sheep were not weighed at the beginning and close of the season. In the judgment of two packers and the man looking after the experiment, however, the sheep handled under the new system were in slightly better condition than those handled under the old system when removed from the Forest. The range grazed under the new system was left in better condition than that grazed under the old system.

On Forests in California no experimental records have been kept for specific cases, but the new method has, perhaps, been adopted to a greater extent in California than elsewhere. It is claimed that what is known as the "new system" in the Northwest, was

followed by the Jesuit Fathers in the handling of their sheep at the early Missions in Southern California. When the range sheep industry was extended to the mountain sections, however, the plan of "pitching" a central camp and grazing to and from this camp, for as long even as six weeks, was adopted. Later, somewhere about 1890, a large number of transient sheep belonging to Basques were driven onto the mountain ranges of Nevada and California. With each band there was a burro used for carrying bed and provisions. The sheep were moved from place to place in a nomadic fashion and naturally secured the best of the range when competing with sheep handled under the old central camp system. As a matter of protection it became necessary for the local sheep owners to adopt the "burro system" in order to secure their share of the range. Once adopted it was found to work advantageously both to the range and sheep, and consequently has been generally adopted by additional sheep owners until it is very largely followed.

On the Plumas Forest, for example, in Northern California, out of 60,000 sheep only one band was handled under the old method during the past summer, notwithstanding the fact that the sheep range is very largely within the timber and brush belt. Each band of sheep is herded by one man, who is furnished with a burro, bed, water bags, and provisions for approximately four days. The burro is packed, belled, and turned loose with the sheep, and when well trained, takes somewhat the place of a trained goat in controlling movements of the sheep. In the early morning the herder will perhaps make a cup of coffee, pack his burro, and go with the sheep until they shade-up when the sun gets hot. He then unpacks and establishes a camp, where he does his main cooking for the day and remains until mid-afternoon, when the sheep are ready to drift over the range again. He merely directs them the way he wishes them to go and camps at night wherever he can find an open spot. Approximately every four

days the camp tender visits each herder and supplies him with an additional four days' rations, and salt for the sheep. The herder and camp tender agree each time as to approximately where the sheep will be at the end of the next four day period. In some instances the herder makes known his position by signaling with smoke. The system has worked excellently, to the advantage of both sheep and range, and sheepmen who have become accustomed to it would not return to the old system of trailing in and out to a central camp over the range which is close grazed and trampled after the first day or two at the camp.

The feature essential for success in handling sheep under this plan is a gentle burro, trained to graze with the sheep and not stray off. Should the burro and the sheep become unruly at the same time, the herder would have difficulty. This is a requirement, however, that can be met, and is being met, in actual practice.

The foregoing tests are merely those of more general character, but within territory typical of the Pacific Coast states. The articles which follow in succeeding issues will present the more comprehensive studies made in Montana, Idaho, and Wyoming, and will be followed by a summary article pointing out more definitely the advantages and limitations of the improved method and the modifications applicable to different sections of the western ranges.

MEXICAN SHEEP IN CALIFORNIA

Several thousand sheep from Mexico have been taken into California during the winter just closed. These sheep represent the old Mexican type shearing but a small fleece of inferior wool. One bunch of 11,000 that were brought into King county, California contained a thousand head of grade Merino rams. These rams were of ages and were very inferior stuff. They have, however, been put on feed and will be butchered when fat.

Wool Growing In Australia

"THE CLASSING OF FLEECES"

By R. H. HARROWELL

IN a previous article I gave a few hints on modern methods of classing wool as practiced in Australia and I would now like to make a few observations that should perhaps have preceded any reference to the actual classing of fleeces.

To appreciate the importance and value of classing wool, the subject should be carried back to its legitimate commencement in order to make it clear that the classing of fleeces is but the logical outcome of Australian methods of sheepraising. It is in fact the culminating point in sheepraising, and the only means by which the years operations can be gauged.

I would first like to make it clear that I hold firmly to the belief that in all matters affecting sheep and wool it is the growers interests that are most important. It is so obviously necessary to encourage the primary producer and attach him firmly to the soil, that I need hardly dwell upon that point. Without the wool producer there could be no middlemen nor consumers of wool, while on the other hand the more producers there are and the more prosperous they are, the better it is for every section of the community. And I tackle this subject of wool classing purely from the growers' point of view, and I want to say right here that despite any statements to the contrary the proper handling of wool means hundreds and thousands of pounds every year to the woolgrowers of Australia and New Zealand. The position is such at this moment that there is hardly one grower of any importance in the Commonwealth or the

Dominion who does not class his clip or have it properly classed.

I have read that it has been reported in America that Australian growers are abandoning the practice of classing their wool and that such a statement is not only absolutely false, but entirely misleading, I can produce overwhelming evidence to prove. The classing of wool is now just as much part of the industry of Australia as the shearing is, and in all my travels throughout the length and breadth of the Commonwealth I have never heard of a shed where the wool is not classed. I have heard, of course, of badly classed wools, and I have seen where the own-

Take the Merino sheep in its primitive state. It is a hardy animal carrying a light fleece of uneven quality. Man comes along and, by selection, succeeds in turning the Merino into an animal of far greater commercial value than it was in its primitive state. He does this by mating carefully—that is by mating the good and culling the bad.

Every sheepman who has built up a good flock from small beginnings is aware of the unevenness that exists even among sheep, descended from one pure strain. There is great variety among the sheep themselves, and there is great variation in the fleece that every individual sheep carries. The best quality of wool is generally found on the shoulder and along the ribs. It usually deteriorates along the back, both as regards length and character, and it becomes much coarser down the breech, and, in poor quality sheep, peters out almost altogether on the belly and points.

Now the chief object of Australian breeders is to first of all class their sheep, and mate them so as to obtain as even a type of wool as possible throughout the flock. Experience tells them whether fine medium or robust wool stands their particular climatic conditions best, and experience also tells them the most profitable limit as regards length of staple. Having the right type of wool fixed in their eye the Australian sheepmen, by the process of selection, endeavor to get as much of that type of wool as they can throughout their entire flocks. By care and skill, exercised for many years, a large number of breeders have brought their flocks to



ONE OF THE BEST AUSTRALIAN SHEARING SHEDS

ers have lost pence per pound in consequence but buyers and brokers are continually at work trying to bring the careless growers into line with the great majority.

Now if the system of handling sheep in Australia were properly understood by those who make such statements as I have referred to they would see that the classing of the fleeces at shearing time is the natural and logical outcome of Australian methods of sheepraising, and that NOT to class the fleeces would mean deliberately throwing away all the advantages the growers have been trying to obtain. I will endeavor to explain how this is so.

a wonderful standard of uniformity, but even among the very best flock the reversion to type is apparent and there is a variation in the type of wool carried by the individual members of that flock.

While the breeders are endeavoring to make the type of wool they fancy predominate throughout their flocks, they also endeavor to get as much of the one type of wool as they can on every individual sheep in the flock. They endeavor to lessen the difference between the quality of the wool on the shoulder and on the breech, and they endeavor to spread the shoulder quality of wool as much as possible over the whole sheep. This can only be done by selection, and selection absolutely depends upon careful classing. The sheep are carefully classed and mated to achieve the two objects above mentioned, and it takes years of steady perseverance to make permanent progress in this respect. The growers, however, have been educated up to the fact that the wool manufacturers must have uniformity in the spinning and yielding qualities of wool, for their various fabrics, and if they can get large lines of uniform quality the growers know they will be paid extra for it. The growers know that when a buyer values a clip he has to make allowance for all that it will cost his principals to sort out the type of wool they want from the type they don't want. He has orders for a certain quality and he has to estimate how much of that quality is in the lot before him, and he does not take any risks when fixing his price. The Australian sheep owner therefore carries out his year's work on his station, or ranch, with his eye solely on that critical moment when his wool will be under the wool valuer's eye. He has for years been breeding and classing his sheep with the one object—namely to get as much of the best quality wools as he can throughout his flock, obviously for the purpose of making his lots of even high quality wool as big as possible at shearing time. He knows that if he can save the manufacturer any cost or loss involved in re-classing the clip, the buyer

will recognize that and pay him a higher price accordingly. Thus it is that apart from the matter of wool quality the Australian pastoralist keeps his eye on another matter which has some influence with the buyer when the clip comes up for valuation. This is in regard to grass seed, burr and other vegetable matter. Choice fabrics cannot be woven out of grass seed and burr, so that before seedy and burry wool can be utilized the seeds and burrs must be removed—and the process of removing them costs money—which the buyer deducts from the price he pays. Therefore the Australian sheep owner so works his sheep as to get a minimum of burr or seed in his clip. Of course, in some districts it is absolutely impossible to avoid the bellies and breeches becoming packed with burr or seed and it is with fleeces such as these that the necessity for, and the advantage of skirting is so apparent.

As therefore the sheep owner's work all through the year (before it comes to a question of shearing) is based on the one great principle of classing, classing and classing, is it likely he will throw away the fruits of all this care and labor by, neglecting to class his fleeces at shearing time? He has spent large sums of money on high class rams, on subdivision and other improvements that are necessary for improving his sheep by selection, and he has done this so that year by year he will see his proportion of high grade wools increase and his proportion of low grade wools decrease. Is it likely then that at shearing time he will jumble all his fleeces up into a confused heap and bury them beneath locks, stained pieces, necks, burry, breeches and bellies all the beautiful clean shafty wool he has managed to grow on the backs and sides of his sheep? It is most ridiculous to suppose it and if any one states that this is the custom in Australia at this time, and that the practice of classing is being abandoned you can, with all the authority of your fine journal, declare such statements to be entirely false. In order to facilitate the classing of his fleeces the Australia

lian woolgrower classes his sheep before they enter the shearing shed. Lambs, wethers and ewes are shorn separately, and so are the hoggets, so that the work of the wool classer and the wool pressers and balers is made much easier.

Thousands of Australian and New Zealand woolgrowers class their own clips, and thousands employ the professional classer. In the majority of cases when the professional classer is employed the owner attaches so much importance to the work of classing that he is in constant attendance at the shed.

The cost of classing the fleeces as they come off the sheep is a mere bagatelle compared with the advantages gained, and I undertake to say that not one wool grower, wool broker or wool-buyer can be found, throughout the length and breadth of Australia or New Zealand who will say that the careful classing and preparation of wool for market is being abandoned in these countries. Wool classing is now never queried—it is just as permanently established as shearing.

There are some careless sheepowners who neglect to class their wool, just as there are some who allow their sheep to become infested with ticks and lice, and as there are others who never mend their fences—but the general statement is correct viz: that the sheepowners of Australia and New Zealand all class their clips, and they would never dream of abandoning the practice. There are scores of clips which have brands which add up to 4 cents per pound to the wool, simply because such brands stand for reliable classing.

Editor's Note.—Yes, the word has been received in this country that the wool was not classed as well in Australia today as was the case years ago. Dalghety & Company are probably the largest handlers of wool in Australia as well as a very reliable firm. In their Annual Review of the wool trade for 1914 they spoke as follows:

"It is with regret that we have to record a falling off in the preparation of wool for market in Australasia gen-

erally. Whilst many owners of clips of varying sizes take a commendable pride in the general get-up of their wool for market, there is no denying the fact that a tremendous number of marks are put on the market in a manner that would shock the old-time grazier.

"There are similar contributing causes both in Australia and New Zealand.

"Firstly, there is an undeniable dearth of skilled labor, even though the wages are most encouraging, and the fact is that many owners have become so disheartened with the behaviour and lack of skill of many shed hands that they have decided either not to skirt their fleeces at all, or to discard the old-time custom of piece-picking, etc.

"Secondly, the rapid cutting up of properties into farm settlements continues to remove from the catalogues many station brands famous for good wool and good classing. The many small clips which together take the place of well-known brands are owned by men who either have not the necessary knowledge to class wool, or who will not be bothered doing so. Hence we have lot after lot of crossbred wool of diverse breeding and mixed quality in the one bale, sometimes skirted but just as often not.

"Thirdly, many growers are thoroughly convinced in their own minds that the buyers do not show sufficient discrimination when valuing between carefully prepared clips and those which are perhaps roughly graded, but not skirted. The arguments and evidence often placed before brokers of the success achieved by owners, who spend practically neither time, money, nor trouble in the preparation of their wool would surprise buyers, and it would be as well for the buying side of the trade to take such matters into consideration."

HOW BEAR ARE POISONED.

Reference is made to your recent conversation with Mr. Fenn relative to the best method of poisoning bear.

In accordance with Mr. Fenn's promise, this matter was taken up with Mr. Samuel Pierce, the hunter, who has been employed on the Uinta, Wasatch, Manti and Fishlake Forests during the past two years. Mr. Pierce has made the following report to this office, giving his opinion with regard to the best method of poisoning bear:

"I favor fruit over any other material. An apple is the best. A bear likes fruit as well as meat or honey and can smell it farther, unless the meat is decaying, in which case a bear will care but little for it.

"I suggest the use of a capsule filled with the best fresh strychnine. The capsule should be placed in the apple. A potato will answer the purpose if fruit cannot be obtained. Comb honey is also excellent when there is certainty it will be found, but a bear cannot smell it very far."

Mr. Pierce uses traps and scent almost exclusively, and while working on the Fishlake Forest during the season of 1913, caught five bear in one trap without moving it. It might be of interest to you to learn that Mr. Pierce killed forty-one bear on the Fishlake Forest and twenty-four on the Manti Forest during the season of 1913. He also killed fifteen on the Manti Forest during the season of 1914. His work on these two forests during the seasons of 1913-1914 has resulted in practically exterminating the bear on this part of the Wasatch range of mountains.

I am enclosing herewith a photograph of the January catch of Hunter T. B. Bledsaw, employed on the Kaibab National Forest in the Arizona strip.

L. F. KNEIPP,
District Forester, Ogden.

FOOT AND MOUTH DISEASE ABOUT ERADICATED

While foot and mouth disease has not been eradicated, the situation appears to be well under control. In the dairy sections of Pennsylvania and Massachusetts the trouble continues, but Illinois has been pretty well clean-

ed up and west of the Missouri River the sky is serene. Kansas was badly jolted at one stage, but effective quarantine prevented dissemination of the plague from the infected region around Wichita. Sporadic outbreaks from the dairy section may be expected, but the U. S. Bureau of Animal Industry is now in full charge, and with its effective organization may be depended on to prevent further spread.

J. E. P.

ANNUAL MEETING AMERICAN NATIONAL LIVESTOCK ASSOCIATION.

The annual meeting of the American National Livestock Association was held in San Francisco March 24th, 25th and 26th. There was a fair attendance of cattlemen from Texas and Arizona, but many of the other cattle states were not well represented. The meeting itself proved very interesting and profitable to those in attendance and will be of benefit to the industry in general. In addition to the addresses and discussions, resolutions were passed dealing with the inspection of animal products brought into the United States; favoring a tariff on imported meats; favoring liberal appropriation for agricultural colleges; asking for a federal appropriation for the destruction of predatory wild animals; protesting against the advance in live stock freight rates; and advocating the leasing of the public domain.

The afternoon of March 26th was set aside at the Panama-Pacific Exposition as American National Livestock day. Addresses were delivered by prominent cattlemen and others on the Exposition grounds, which were listened to by a large audience.

At the close of the meeting, Dwight B. Heard of Phoenix, Arizona, was elected president; M. K. Parson of Salt Lake City, Utah, vice-president; T. W. Tomlinson of Denver, Colorado, secretary; and S. H. Cowan of Fort Worth, Texas, as attorney.

Please get us a subscriber.

WOOL IN EASTERN NEVADA.

We have not disposed of our wool yet nor have we heard of any being contracted for in this vicinity.

The general impression here is that the buyers are attempting to drive the prices down, and the growers seem to be as determined to get what the wool is worth, but if they succeed it will be something new in the history of Nevada wool.

W. T. JENKINS CO.,
Nevada.

**THE GENERAL
LIVESTOCK SITUATION**

Livestock feeders at the close of the winter are striking balances and with the exception of those whose experience was with sheep, losses have been heavy. Only in the case of a few yearlings and cheap light cattle, have beef makers even affected an even break, while the majority have not received 40 cents per bushel for their corn. As a result cattle feeding is being ana-themized and veterans at the game are registering a vow never to handle another steer. Of course they will forget all about it, the moment packers change their policy and conclude to encourage the finisher to replenish his feed lots and pastures. It has been the most disastrous season in trade annals, which is saying much. Cattle

were laid in high, the feed bill was onerous and muddy feed lots forced premature marketing. Beef tonnage, owing to foot and mouth disease, has been excessive, cattle that were merely in feeder flesh being forced to the shambles by the hundred thousand. As a result scores of cattle feeders are contemplating turning their attention to sheep, and a healthy feeder market next fall is inevitable unless something unexpected happens meanwhile.

Hogs have done but little better than cattle. The winter crop has been cashed fully \$2 per cwt. lower than growers expected, and Packington emissaries who have been urging the country to "grow more hogs" have lapsed into silence. Packers have suddenly discovered that they could handle the load and that overproduction is possible. Had the German market been open and the southern outlet uncontracted, present stocks at northern packing points would not have accumulated, but the hog raiser has been penalized for adopting an expansion policy and is now nursing red-eyed regret.

Had feeders east of the Missouri River been able to put in the usual number of western sheep and lambs, it is reasonable to assume that the market would have exhibited the same demoralization as cattle and hogs. Scarcity has been the keynote of the situation. Up to a certain limit, the

public will eat lamb and mutton at lobster and terrapin prices, but the limit is easily reached, and a few in excess breaks the market a dollar. Colorado feeders have been in luck to some extent and most of them admit that they had made a little money, which is unusual. Had Iowa, Michigan, Illinois, Indiana, and farm feeding territory further east not have been prevented from stocking up last fall, both sheep and lambs would have sold considerably lower all winter, as mutton would have experienced the same disastrous competition from cheap pork as the beef market. J. E. P.

**THE WAY WOOL
PRICES ARE FIXED**

The disposition of the Eastern dealers with empty lofts to talk down prices for the effect such comment may have on their current operations in the woolgrowing sections, is another factor of no small account in the present tendency of values to ease off.

This kind of talk is usually pooh-poohed by the growers, but in the end, it generally makes a noticeable impression on their attitude. So far this season they seem to have resisted this influence quite successfully, but their customers are bound to realize the necessity of being cautious before they have gone much farther.—Trade Record.

**Mr. Woolgrower:**

You and Your Family are going to the Pacific Coast to visit the Two Big Fairs? Sure. The Old Reliable Line with Safety and Service is at your Service. We want your business, both Freight and Passenger. We desire to show our appreciation of it by taking a personal interest in each and knowing that you are well taken care of.

For beautifully illustrated literature, rates, information or anything else you desire, write or better still call on—

J. M. FULTON, Asst Gen. F. & P. A., Reno, Nevada

H. F. KERN, General Agent, Denver, Colorado

C. L. McFAUL, District F. & P. A., Salt Lake City, Utah

Our English Wool Letter

"HUGE WAR DEMANDS CREATE AN UNPARALLELED SITUATION."

From Our Special Correspondent

Bradford, March 13, 1915.

It is now an axiom in the wool trade that the unexpected happens, and this is exactly what has taken place during the past two months. Woolmen can do all the reasoning possible they can summarise the pros and cons of the situation, and if they do the opposite to what common sense would seem to dictate, they usually come out "top dog." When I wrote last December and the beginning of January there was nothing to indicate any sudden change in an upward direction, but, of course, the strongest factor of all was then in operation, and the embargo if it had continued would have brought prices down to a level that nobody likes to contemplate. But the granting of the privilege to ship merinos to the United States and Continental neutral countries revealed a situation that no one thought existed, and has shown how hungry the trade is for Australian merino wools. Here we have in a nutshell the cause of the radical change which has taken place since the middle of

although it revealed factors and forces which nobody thought of. At one stroke it epitomized the standing of the raw material, and the avalanche of orders that poured into the market when it became known that the embargo was raised and merinos were to be allowed to be shipped to the United States and neutral Continental countries surpassed the wildest expectations of any man. The result was that the sales passed off with competition and values the very antithesis of what we saw in December, and an upward movement began which prob-

materially felt upon values, and the prices ruling today cannot but satisfy any reasonable grower. Let one think that Europe is engaged in the most deadly war the world has ever seen, and instead of paralyzed markets, the textile industry of Great Britain is enjoying an unparalleled boom. An American at the second series of auctions said to the writer that conditions were better here in England, and trade much healthier than it is across the Atlantic.

Readers will be interested if I show the sensible advances which took place

at the second series of London sales which finished a week ago, and the following supplies the particulars:

Australian Wool.

Greasy merino, superior, $1\frac{1}{2}$ d to 2d higher.

Greasy merino, average to good, $1\frac{1}{2}$ d to 2d higher.

Greasy merino, poor condition, 1d higher.

Greasy merino, inferior locks and pieces, 1d higher.

Scoured merino, superior, 3d to 4d higher.

Scoured merino, average to good, 2d to 3d higher.

Greasy crossbred, fine, superior, $\frac{1}{2}$ d to 1d higher.

Greasy crossbred, medium, superior, $1\frac{1}{2}$ d higher.

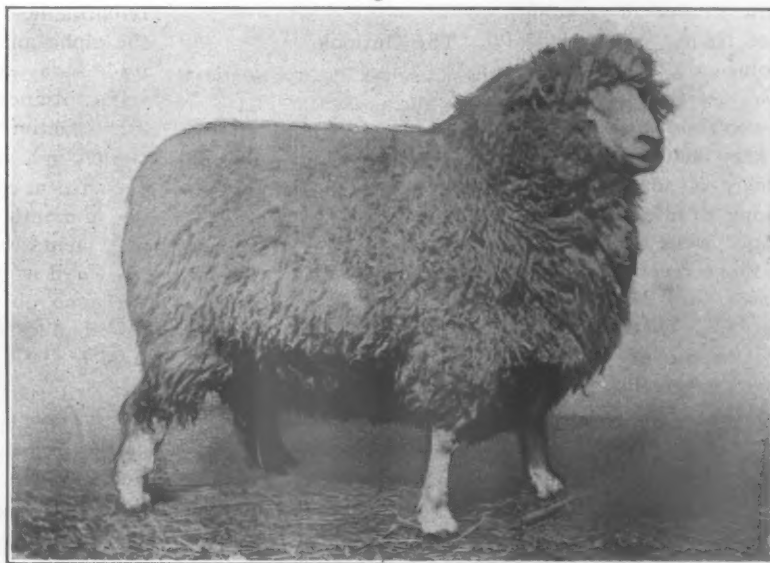
Greasy crossbred, medium, ordinary, 1d to $1\frac{1}{2}$ d higher.

Greasy crossbred coarse, superior, $1\frac{1}{2}$ d higher.

Scoured crossbred, fine, 1d to $1\frac{1}{2}$ d higher.

Scoured crossbreds, medium and coarse, $1\frac{1}{2}$ d to 2d higher.

The words "boom" and "slump" are two most objectionable terms to every



AN EXCELLENT COTSWOLD RAM OWNED BY MCGILL & ADAMS, ELY, NEVADA

January, and in the evolution of the situation, American pastoralists must benefit considerably. The general opinion obtains on this side that the embargo was removed in response to an urgent appeal of the Australian Government, and probably that is the case.

London Wool Sales.

The second series of Colonial sales ended nearly a week ago, and the trade is today feeling the impetus of those auctions. I will not waste much space in dilating upon that big event,

ably has not yet ended. In a sentence, the final result of the London sales was to establish decent merino greasy combing wool at 4c per pound, more than was ruling in January; in fact, all good wools were 15 per cent dearer, and faulty wools a full 2c. Today there is as active a demand for wool where ever it is being offered for sale as anyone could desire to see. It only serves to show that notwithstanding the competition of the Continent being largely cut off, there is sufficient buying power still left to make itself

woolman, and yet the former is the only one that can be employed to set forth adequately the state of the textile industry. The reader must not forget that existing conditions in manufacturing centers like the West Riding of Yorkshire determine the price of wool, and I am glad to say that trade could not be better. Mills everywhere are running either day and night or from 6 a. m. to 8 p. m. and the women and girls are practically slaves at the present time, although they are making a heroic effort to meet the demands which the War Office is making upon them. Everybody today must make sacrifices, and we find that workers everywhere are glad at the opportunity to stand by and contribute a little towards keeping the flag flying. It is difficult to put in words the actual state of trade. So many of the men have joined the colors that there is today a dearth of skilled employees, and everybody is wanting more hands to keep machinery running. Already there is some screaming being done among Bradford wool combers, whose wages were recently advanced 48c for those receiving weekly \$5 and upwards, and 24c for those receiving under \$5. There is a scarcity of help, and no one expects any improvement. Everybody is earning good money, and all this is contributing to a healthy state in the home trade, but war requirements on the part of the British, French and Russian Governments are colossal. Every comb, spindle, and loom is working at full tilt, and there is nothing to indicate any slackening for a very considerable time to come. Bradford especially is being called upon to supply such markets as Spain, Holland and Sweden, where in past days Germany has been the principal source of supply for dry combed tops, the result being that Bradford wool combers cannot cope with the offers they have, and even Japan is in the market this week for a supply of 700,000 pounds of dry combed merino tops.

Little need be said on this head because it is a matter which directly affects American importers, and more

is known on your side than here. The whole scheme affects American wool growers just according to the amount of Australian and South African merinos that can be imported. Some who bought in London at the January sales have not yet got their permits to ship, and none have yet been issued under the new scheme. Evidently there is considerable opposition, but that affects entirely American importers and not this market at all. Some big weights of wool, tops, and noils have been bought for shipment to Boston and elsewhere, but the Board of Trade is very slow indeed about granting permits. However, it is the writer's firm conviction that all the stuff bought up to now will be allowed to be exported providing proper guarantees are forthcoming.

The Outlook.

It is almost useless to prognosticate at a time like the present. There are those who are hoping to see merinos recede, stating as their reason that the manufacturers of Great Britain cannot consume the clips of Australia and South Africa. Possibly there is not the machinery available to cope with supplies, but a more healthy state of business cannot be imagined. What is troubling everyone at the present time is transport difficulties, and we find today a big weight of wool on its way to this country but supplies arriving at the mill in a very tantalizing way. Everybody is wanting to buy merinos, and if reasonable shipping facilities are granted we shall not see prices very much different from what they are today. It is hard to believe that higher prices will obtain, though when a passage is forced through the Dardanelles, big shipments of merinos will certainly be made to Russia, and no doubt Continental neutrals are also wanting urgently big quantities of raw material. I therefore consider that the outlook for merinos is better than the majority think it is. Wool is selling freely in Australia, and America will also operate at the forthcoming series in London, providing buyers are assured that reasonable facilities are granted for export. The future is encouraging, and so

long as the present booming trade lasts, and the outside world is in such good order for receiving supplies, values cannot move very materially from today's level in a downward direction.

I have said little so far about crossbreds. What can be said? The New Zealand clip is being lifted in an astonishingly vigorous way, and every bale that the Dominion and Australia can turn out is earmarked. If the war continues, all the stock of crossbreds will be exhausted by next September; in fact, many are buying all they possibly can in the hope of using same. Certainly today's values although at a record level are safe, and there are those who are freely prophesying still higher prices for crossbreds. The state of affairs in these wools is really remarkable. Army requirements are the alpha and omega of the textile trade today, and will be so long as the war continues. Soldiers in the trenches are sometimes wearing out a suit of clothes in a single week; in fact, given even decent conditions a suit is not lasting a month, consequently future requirements will demand big weights of crossbred wools, and price today seems to be no object to either spinners or manufacturers. Such is the present state of the English wool trade and as one casts one's eyes forward, one can see nothing to indicate any cessation in the present demand and consumption of the raw material.

So far as one can read the future, the outlook viewed from an American wool grower's standpoint could not be better. Many people here expect that the Board of Trade will again reimpose the embargo when they are convinced that Great Britain and her Allies will require all prospective supplies of Australian and South African merinos. That today is the opinion of the British War Office, and therefore I do not think any American grower need be in any hurry to sell. What we all would like to see is American mills run full time. Trade here booms, hands are wanted, and most mills are running till 8 and 9 p. m. or all through the night, and everybody appears to be inundated with orders and work.

The Boston Wool Market

BY OUR BOSTON CORRESPONDENT

CONDITIONS in the local wool market have not been as unsatisfactory in recent months. Domestic wool stocks are running low, but there is ample offering to meet the current demand, which has dropped to a very low point. Most of the recent business has been in foreign wools to arrive. This has been mainly in Australian Merinos, in which considerable activity has developed, but there has also been something doing in South American grades. While most of the South American wools recently arriving at this port has been for manufacturers' account, dealers have had something to offer. South American lambs have been plentiful, and offerings of these are now relatively larger than of the better grades.

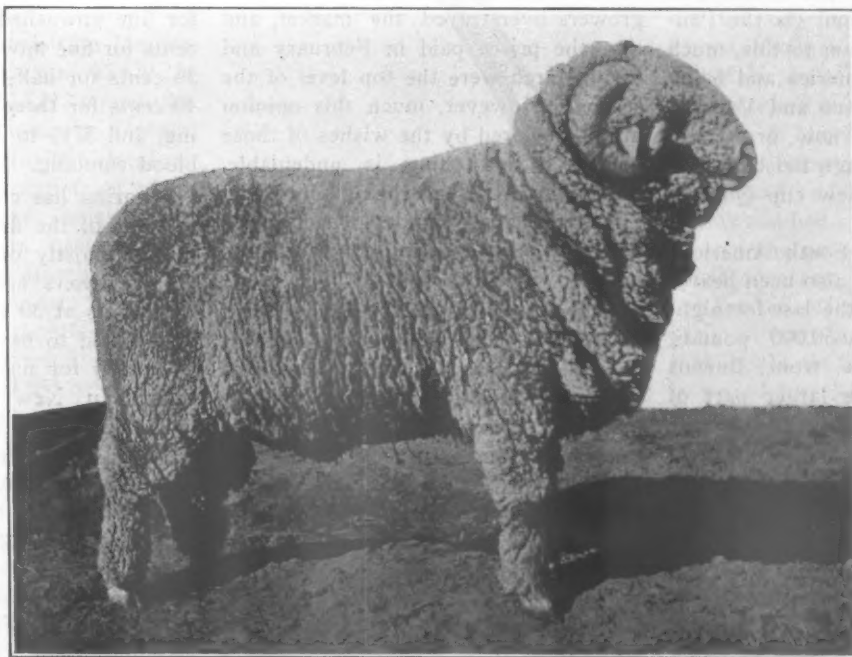
While super pulled wools were having their little boom earlier in the year, these lambs' wools looked pretty good, as it was thought that they could be used to mix with the more costly grades, and yet give a mixture that would be acceptable for making the army goods. The edge is now off the army boom. B supers pulled have dropped 8 to 10 cents a pound from the high point. Blends are not now needed to the same extent formerly noted, and manufacturers have not been looking as sharply after supplies as when good Eastern B supers were selling up to 68 to 70 cents a pound. Moreover, these South American lambs have proved to be a difficult proposition in actual prac-

tice. They are too "slippery" to spin well, unless blended skilfully. In some cases, efforts were made to spin them without mixing, but this did not work, and it has been found difficult, as a matter of fact, to make a good spinning mixture. Consequently offering of such wools are going slowly, and prices are easier, though holders are loth to acknowledge the fact.

There is a real shortage of the better grades of medium wools, especial-

In this market a wide difference of opinion has developed in regard to the value of domestic pulled wools. Several of the smaller houses loaded up heavily on the top of the boom, and are now carrying large stocks for which there is little or no demand. Naturally, these holders believe in their wools, and are looking for another boom to materialize which will let them out without loss. They are endeavoring earnestly to maintain values, but find that a difficult matter in the face of the lack of demand. The belief that prices will go higher is by no means confined to the parties named above. Others seem to be equally confident that another flurry in wool prices is due, and are shaping their operations accordingly.

On the other hand, manufacturers and many dealers look on the present situation as a very dangerous one. Prices are on so fictitious a level that not only is there little prospect of a profit in handling the new clip, but the possibility of an early end to the war suggests that serious losses may follow anything but the most conservative trading. The usual cry is heard that the larger houses are trying to bear the market so that they can get the new clip wools at their own prices, and there seems to be no doubt that the Australian wool situation is being used as far as possible to relieve the domestic market. Sufficient to say, the attitude of both parties towards the mar-



YEARLING RAMBOUILLET RAM OWNED BY CUNNINGHAM SHEEP & LAND CO., OREGON

ly of Territory clips. About all that is available here in the way of domestic medium wools is some scattering lots of choice fleeces, which are held at extremely high prices. Quarter-blood Ohio wool has sold at 37½ cents, and three-eighths-blood is held ever higher than this, in some cases as high as 40 cents, though nothing has yet been sold at above 37 to 37½ cents. It is this that led to contracting of medium Territory clips earlier in the season, and is why buyers are now willing to pay extreme prices in the fleece wool sections.

ket has materially changed since the agreement with the Australian authorities has allowed freer shipments of wool to be made directly to this country.

As far as Australia is concerned the Textile Alliance plan is now in full working order. Liberal shipments have already been made or will be made in the near future. Total American purchases in Australia to date are estimated at 130,000 bales, compared with about 60,000 bales last year. This year's purchases are far above the average of direct business, even in the most active years. At least five steamers are on the way to this country, or are under charter to sail via the Panama Canal. In addition to this, much wool is coming to America and being landed at San Francisco and Vancouver. The season is now practically over in Australia, though Brisbane will have an offering of new clip Queensland wools April 20.

Recent arrivals of South American wools at Boston have also been heavy, total receipts during the last fortnight in March being 26,650,000 pounds, most of which came from Buenos Ayres. Probably the larger part of this wool was bought directly by the mills, or had been turned over to them by the dealers, yet enough came on the market to cause less attention to be given to medium Territories from the new clip. Buenos Ayres crossbreds are now quoted here at 35 to 36 cents for Lincolns, 37 to 38 cents for straight quarters and 41 to 42 cents for high quarters. These prices are in the grease.

It is more difficult to arrive at the actual value of the Australian wools. Heavy arrivals were expected to make an easier market, but holders are not disposed to sacrifice their wools, while manufacturers are showing so much interest. Good combing Merinos, 64s to 70s; are quotable at 65 to 68 cents, with some choice lots offered at 70 cents clean. Cape wools have been offered pretty freely, at an extreme range of 60 to 70 cents. Both snow white and greasy wools are offered, most of the recent transactions being

on the basis of 63 to 65 cents for greasy and 60 to 63 cents for snow white. One concern is credited with having purchased about 4,000 bales of these wools, of which about one-half has arrived and been mostly resold.

Dealers here report that they are doing very little in the West. Shearing is reported to be in progress at many points in Southern California, Nevada, Southern Utah and Arizona, but little is being done. Growers are said to be more ready to listen to bids, in fact, it is reported in some cases that Eastern buyers have been asked to renew bids that had previously been turned down. It is claimed that the wool growers overstrayed the market, and that the prices paid in February and early March were the top level of the season. However, much this opinion may be colored by the wishes of those holding it, one thing is undeniable. Australian wools are being offered in this market at a clean cost which makes the early purchases and contracts look high.

Army contracts are being run out, and as that occurs there is less and less demand for B supers and low wools of all kinds. B supers are slowly dropping back to a parity with the better grades, though still quoted above normal figures. Some pullers are reported to have recently refused 64 cents for their Bs, and are asking 65 cents. Good Eastern Bs are quoted at 60 to 65 cents, the lower range being as much as some manufacturers are willing to pay. Holders of these wools are finding a wide difference in the demand now from what it was when the mills were busy on army contracts and manufacturers were pinched for supplies.

Eastern A supers are quotable at 65 to 68 cents, with extras and fine A supers at 67 to 70 cents, and C supers at 48 to 52 cents. Chicago B supers are not quotable at over 60 to 63 cents, though no sales of importance are reported. Some Western pullers are asking fully as much for their wools as Eastern pullers, but without takers. Chicago A supers are quotable at 62 to 64 cents. Fine combing pulled wools are also lower, though medium and

low wools are fairly strong. Combing pulled is quotable at 65 to 68 cents, with medium combing at 62 to 64 cents and coarse combing at 54 to 57 cents.

Fleece wools are quiet here, the only recent sales of note being three-eighths-blood combing at 37½ cents. During the month, fine unwashed delaine has sold at 30½ to 31 cents and of XX and above washed Ohio at 32½ to 33 cents. Current quotations for Ohio fleeces are 35 to 36 cents for fine washed delaine; 32½ to 33 cents for XX and above, 32 to 33 cents for unmerchantable delaine, 29 to 30 cents for fine unmerchantable, 30 to 31 cents for fine unwashed delaine, 27 to 28 cents for fine unwashed clothing, 35 to 36 cents for half-blood combing, 38 to 40 cents for three-eighths-blood combing, and 37½ to 38 cents for quarter-blood combing.

Shearing has commenced in some sections of the fleece wool districts, though mostly of fat sheep thus far. Ohio growers are holding their new fine wools at 30 cents, and this figure is reported to have been paid both in Ohio and for medium wools in Kentucky. In New York, early shorn wools are being offered. One good-sized clip is held at a figure that means 33½ cents laid down here. The medium wool from this clip would have to sell at 37 to 38 cents to let a possible purchaser out whole. High prices are also being asked for fleece wools in Michigan, where growers are demanding 30 to 33 cents. Across the line in Indiana, some driven sheep's wool is offered at 32½ cents for short half-blood.

Undoubtedly the situation hinges on the position in the near future of the London market. While Australia is issuing permits to ship wool with reasonable liberty, little progress is being made in England. Crossbreds are not allowed to be shipped at all and Merinos are coming out so slowly that Americans bought only 6,000 bales at the last sale. It is understood that all applications for permits are being scrutinized carefully by the British authorities, and any dealer suspected of favor-

oring Germany is likely to find it difficult to get wool through England. The placing of wool on the contraband list by England promises to eliminate Germany as a buyer of United States Territory wools this season, thereby limiting the competition.

Receipts of foreign wool were very large during March, the total being three times that of domestic receipts. Total receipts of wool for the month of March were 50,828,476 pounds, including 13,303,984 pounds domestic and 37,524,492 pounds foreign. This compares with 28,371,238 pounds for March, 1914, of which 7,925,028 pounds were domestic, and 20,446,210 pounds foreign.

Total receipts of wool from January 1 to March 31, 1915, were 95,829,224 pounds, including 38,515,212 pounds domestic and 57,314,012 pounds foreign. For the same period in 1914, total receipts were 84,534,845 pounds, of which 28,686,841 pounds were domestic and 55,848,004 pounds were foreign.

Total shipments for March were 25,725,953 pounds, against 30,218,759 pounds for the same month last year. From January 1 to March 31, 1915, total shipments were 64,833,204 pounds, against 78,929,865 pounds for the same period in 1914.

LIGHT EASTERN WOOL CLIP.

Wool buyers operating in the fleece states find their occupation gone. Not only are growers of wool indisposed to take early bids, but there is little wool to be had anywhere. The shortage compared with the spring clip of the past five years ranges from 25 to 75 per cent according to locality. This is due to free marketing of native ewes and almost entire absence of western stock at shearing time owing to quarantine restrictions. Had Michigan, Ohio and other winter feeding states been able to carry out their usual program, dealers would have had access to tons of shorn wool that has been pulled from the fleeces by packers during the winter.

Please get us a new subscriber.

DOCKING LAMBS.

Recently the writer visited Red Bluff, California, and discussed the



THE ELLENWOOD DOCKER

subject of docking lambs with Mr. Fred A. Ellenwood of that city, who is Secretary of the California Woolgrowers' Association and also a member of



DOCKING WITH THE IRON

the firm of Ramsey and Ellenwood that run sheep in that section. For several years Mr. Ellenwood has been docking his lambs with a hot iron in-

stead of using a knife. Long ago he became satisfied that the loss of blood incidental to knife docking gave the lamb a set-back from which it recovered slowly, if at all, and from which one per cent died. To prove the injury from docking with a knife, he weighed and marked several ewe lambs and then docked a part of them with the knife and the balance with a hot iron. The lambs were carefully weighed from time to time, with the result that those docked with the iron made a decidedly greater gain than those on which the knife was used. The difference in weight was so much that Mr. Ellenwood decided never again to use the knife for docking lambs, and he set about to perfect an iron that would be as nearly ideal as possible. We here submit an etching showing the iron as Mr. Ellenwood has perfected it and photographs showing the act of docking and the docked lamb. Mr. Ellenwood had some trouble getting an iron of the proper size and sharpness so as to carry just sufficient heat to cut the tail off nicely and sear it properly without burning a lot of tissues that should not be lost. Where the tail is seared too deeply, it heals very slowly, but where the heat of the iron is just right, the tail heals up very quickly. Mr. Ellenwood has, therefore, experimented with the iron until he has one that carries the proper amount of heat.

As a rule woolgrowers do not appreciate the loss that comes from docking lambs under the old method. At best there is a loss of considerable blood which comes at a time in the lamb's life when he can ill afford to spare it, and then probably one per cent of the docked lambs die. There is no question that this loss of blood in a young lamb is a serious drawback, and it must stop its growth for some time. We have all seen these docked lambs stand with their backs humped up, refusing to eat for a few days while recovering from the loss of blood. Mr. Ellenwood has never lost a lamb docked with his iron nor has he seen lambs stand with their backs humped up, and he believes that dock-

ing with the iron gives no setback whatever.

If one becomes used to using the iron, lambs can be docked just as rapidly as with the knife provided one is supplied with about three irons so that there is no delay in heating. Naturally the use of the iron allows lambs to be docked closer and older, and it is highly desirable to use it on pure bred lambs.

After going over the matter carefully with Mr. Ellenwood and other sheepmen in that section, who have adopted his method, we have asked Mr. Ellenwood to have a supply of these irons made and to have direc-



JUST AFTER DOCKING. NO LOSS OF BLOOD
—BUT LITTLE PAIN

tions for their use printed so that other sheepmen who wish to try the system can do so. We suggest that those interested write direct to Fred A. Ellenwood, Red Bluff, California.

IN NEBRASKA AND WYOMING.

It has been very fortunate for the sheep feeders of Central and Eastern Nebraska that most of their stuff was of western origin and was finished and marketed early at uniformly good prices. I think it was the best early market that I can remember. They all made good money and will be eager to get in the game again next fall.

While markets have been advancing and corn getting cheaper those that are still feeding in open yards are surely having troubles of their own. The winter has been long and hard. No bare ground since the first week in December. A succession of storms and blizzards have rendered roads impassable for two months, culminating in a three day blizzard, which has put two feet or more of snow on the level and piled up huge drifts wherever there is anything to hold it. Fortunately it has been very cold. About ten degrees of frost. Shudder to think what would have resulted at a temperature of zero or below and what is likely to come when all this snow melts.

We are about through lambing our registered Rambouillets and Hampshire ewes and glad of it. There are many nicer jobs than handling ewes and lambs in a winter like this, and the worst is yet to come. Water and mud are not much better than snow. Thankful to say I have made a very good lambing considering conditions. About 1,600 head at present. Of course, we have sheds and lambs come very strong, but they need sunshine and open yards as soon as possible and that they cannot get this season. Oh, for a sunny fringe of sage brush in Wyoming or Idaho!

Returned a few days ago from a trip to Omaha, Casper, Denver and Elsie. Had not seen the sun for ten days until I reached Casper. The eastern half of Wyoming has had a lot of snow this winter, but around Casper and west, including the Big Horn Basin, the conditions have been ideal. Snows came just about as needed and there was no very cold weather.

Stock of all kinds are in better shape for the time of the year than they have been for many years. Did not hear of any heavy losses in the snow covered section, but infer that most outfits had a pretty hard time of it. Take the state as a whole, would say the winter loss has been very small, the condition of the sheep above average, and the prospects for a good, well grown wool clip excellent. Sheepmen at Casper

are very optimistic. Ideas of wool values away up. No wool that I could learn is contracted or sold. Unless a change "comes over the spirit of their dreams" doubt if a buyer could go into Casper and contract any considerable amount of wool at 25 cents. Most of them would be scared that they were letting go too soon. I did not hear of any stock sheep for sale or new men going into business.

It takes a considerable investment now-a-days to go into the sheep business and the net results in Central Wyoming for the last four or five years have not been very encouraging. Profits have been rather uncertain and in a majority of cases conspicuous by their absence. Still we hope.

Abbott, Nebraska, March 10.

ROBT. TAYLOR.

FIELD PEAS A GREAT FEED.

Last spring we planted nearly one hundred acres of field peas to try out for grazing feed for our sheep and hogs. We planted them with our grain drill the same as grain, planting about eighty pounds to the acre. You can plant them quite early as they will stand much cold. They were a dry farm crop with us as they were never irrigated. In due time we had nearly one hundred acres of beautiful pea blossoms and later the peas.

Just as they were hard and beginning to dry, we turned in 3,000 head of old ewes and lambs on eighty acres, and on a twenty-acre field we turned our thorough bred black face buck lambs. We were very careful in first turning them on to herd them back and only give them a little at first and work them on by degrees. Never saw better feed nor sheep do better. After the sheep were through with the field it looked like there was nothing left, but we turned in about 100 head of hogs and they did better than on any other feed we ever tried. Field peas cut and cured for hay is a change and a most wonderful feed for milk cows and sheep.

IDAHO RANCH COMPANY,
Alexander, Idaho.



SIXTEEN years ago I started to breed mutton form into the Rambouillet sheep to give them more spread of ribs, shorter legs, good backs and to iron out the wrinkles. Our sheep are not all as smooth as the ones here pictured but we have a big percentage of them just as smooth—their wool is strong, soft and extra good length and very light shrinkage.

Our sheep are range raised and extremely hardy, our losses being very light. We have a record of carrying over 632 ram lambs from November first until May first without loss of a single one.

As for size, our Rambouillets are like our Shropshires, a lot heavier than they look because they are thick and deep bodied and close to the ground; they are pure bred and suitable for improving Merino flocks and crossing on coarse ewes where the results, desired are both wool and mutton.

We are also breeders of Shropshires, Oxfords, Cotswold and Lincoln sheep—we have every facility for putting our rams into serviceable condition so that satisfactory results are certain.

We invite correspondence.

KNOLLIN & FINCH, Soda Springs, Idaho

KNOLLIN & MYRUP, Howe, Idaho

OR

A. J. KNOLLIN, South Omaha, Nebraska

Do Your Shearing with Be

Take the wool off evenly and quickly. Get a long even that buyers. Any of the **Stewart** machines shown here wit

Stewart No. 9 Hand Operated Machine —Ball Bearing

For Flocks up to 200



\$11.50

with four
sets of
combs
and
cutters

This machine has a substantial fly wheel enclosed in the gear case. That facilitates the easy turning. The gears are all cut (not cast) from the solid steel bar and are file hard. They are enclosed, protected and run in oil. Every point of friction is fitted with ball bearings. That contributes much to the easy running and long life of the machine. The shearing head is also ball bearing throughout.



Send us \$2.00 and we will ship C. O. D. for balance, or remit in full, as you prefer. If the machine doesn't please you in every way, return it inside 30 days and we will send your money back, including transportation charges. If you haven't sheared yet, send for one of these machines today and see what real satisfaction there is in this splendid machine.

The price all complete as described is only \$11.50, which includes four sets of knives.

Stewart Little Major Shearing Machine

For Flocks from 200 to 1500

This illustrates the Stewart Little Major Gasoline Motor equipped with our attachment for shearing sheep and goats. The shear can be started or stopped, connected or disconnected while motor runs. A stout spring on clutch bracket either holds or releases clutch—just a pull of the first section of tubing outward, or push inward by shearer. Fitted with latest No 12 Stewart shear.

As a complete single power unit—warranted to clip any wool or mohair grown—the Stewart Little Major Sheep and Goat Shearing Machine fills a long felt want among those owners who consider hand power machines inadequate for their bands, and who have no available engine to spare for driving a power machine. It is also a boon for the custom shearer by reason of its simplicity and light weight—90 pounds.

Price, complete as shown with battery without table, f. o. b. Chicago.....\$50.00

With high tension magneto\$60.00



What Users Say

McAndrews (via Mack), Col., July 20, 1914.
In 1909 I installed a new Stewart Machine sheep shearing plant consisting of only six machines, and have since then enlarged it to a fifteen machine plant. After five years' experience with the plant I am pleased to state that the Stewart Sheep Shearing Machinery has proven satisfactory in every respect.

R. A. TANNEY.

Winfield, Iowa, Aug. 6, 1914.
The Sheep Shearing Machine No. 9 with horse clipper attachment is all that it could be.

E. ENKE.

Joliet, Ill., July 14, 1914.
We now have our shearing plant equipped with eight Stewart Machines, which are uniformly giving good service.

The perfection of the New Stewart Machine has placed the responsibility for the quality and quantity of work done entirely upon the operator. We could not ask more from them.

MILLSDALE SHEEP FEEDING YARDS,
A. J. MILLS, Manager.

Farwell, Mich.
I am well pleased with your machine and think it a great labor saving device, besides doing a great deal better work than can be done by hand.

J. L. LITTLEFIELD.

Hansell, Ia., August 12, 1914.
Have used one of your power machines for three years. It is all one could expect in its line.

WM. R. HELD.

Farmington, N. H., July, 1914.
I am very much pleased with the Stewart Sheep Shearing Machine which I bought from you about three years ago. It does good work and I found it will do what you claim.

FRANK H. DOW.

Los Banos, Cal., July 1914.
I have tried your Little Major Shearing Machine and it is proving satisfactory. You will please ship me one just the same kind. Please ship as possible. I want to use it right away.

W. W. WILSON.

Darlington, Wis., July 1914.
We have used your Stewart Sheep Shearing Machine for several years and no other machine could do better work.

Send your order now for a machine suitable for your flock.

Chicago Flexible Shaft Company

Be and Comfort This Year

that will bring the most from
it for you. **Order Now.**

Stewart Little Wonder Power Shearing Outfit

For Flocks from 1500 to 5000

This is an exceptionally
able power outfit for own-
of flocks ranging from
to 5,000. It consists of a
grade two-horse power
mobile type, gasoline
or, two Stewart shears,
working independently,
disc grinder. The whole
combined in one machine
can be easily moved
from place to place by
men, or carried in a
ry. It is just the thing
two shearers who wish to
vel about from flock to
during the shearing

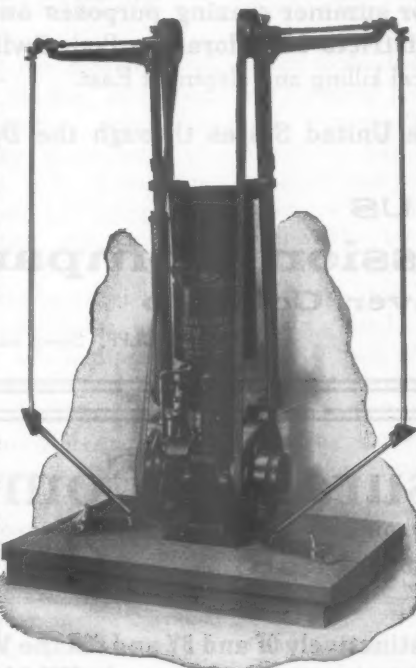
Price.

Stewart "Little Won-
der" including en-
gine, two shears,
grinder batteries,
marker, tanks and
extras\$100.00
Wide Combs at 50
cents each 6.00
Wide Cutters at 15
cents each 3.60

Complete\$109.60

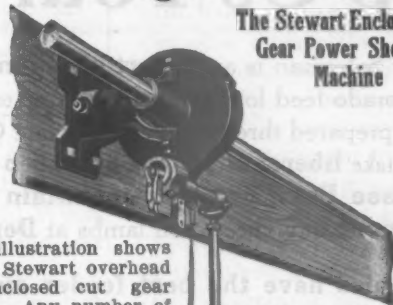
The Stewart "Little Won-
der" is fitted with a Magneto
attachment if desired at an
additional cost of \$10.00 to
the list.

Write for catalog of this and other power Shearing Machines.



For the Large Flock Owner

The Stewart Enclosed Cut
Gear Power Shearing
Machine



This illustration shows
a single Stewart overhead
type, enclosed cut gear
machine. Any number of
these may be operated on
one line shaft.

Every moving part is
securely enclosed in a
metal case where it runs
in oil protected from dust
and dirt.

This machine runs ab-
solutely without thrust. The
action is positive and there
is no lost motion.

No friction wheels to slip
or leather to get oil soaked
or spongy.

Runs on slow line shaft
with speed of about 450 re-
volutions per minute.

Price per unit, \$50.00.

Write for
special catalog
and prices on
complete
plants.



Stewart Machines:

July, 1914. I have been well satisfied with our investment;
with that, the Stewart way is the only way
which I would permit our sheep to be shorn.
I am also now using your horse clipper at-
tachment, which more than paid for itself
the first year.

GEO. D. PARKINSON & SON.

Langlois, Ore., July 16, 1914.

July 16, 1914. I have used your Little Wonder Sheep
Shearing Machine for five successive years
and it is a complete success. No man who
wishes to shear can make a mistake in
buying one of the Stewart Sheep Shearing
Machines. I am putting in a water work to
run with. I would like you to send me
a line shaft and all that I would
need for running four of the Stewart shears.

E. B. SYPHER.

Monticello, Ill., August 1, 1914.
The "Little Wonder" Stewart Sheep Shear-
ing Machine is truly a little wonder. Plenty
of power, speed and a splendid machine.

FRANK O. DILATASH.

Sterling City, Tex., July 28, 1914.
Some time ago I purchased a Stewart
Sheep Shearing Machine from you and used
it for two seasons, and its work was entire-
ly satisfactory. I think the machine the
best I have ever seen.

A. A. GAMBLE.

Carpenter, S. D., July 8, 1914.
I have used a Stewart No. 9 Shearing Ma-
chine for four years and it works as good
as new yet. The machine shears clean and
runs easy. I had never seen a machine work

until I got this one, and can shear a sheep
in four minutes now.

W. L. MERRIMAN.

Fowlerville, Mich., July 26, 1914.

I have used one of your Little Wonder
Shearing Machines for five seasons and there
is no better. I shear thousands of sheep
every year. After shearing I use my engine
for pumping water.

WM. WENDEL.

Breedlove, W. V., July 15, 1914.

We bought one of your Stewart Sheep
Shearing Machine about three years ago. We
like it; runs easy and does good work. We
have never seen its equal anywhere.

JACOB AND JULIUS SLAUBAUGH.

Write your flock or write for new 1915 Catalogue

596 La Salle Avenue

CHICAGO

AMERICAN COMMISSION COMPANY

UNION STOCK YARDS
DENVER, COLORADO

Ship Us Your Sheep and Lambs

Our Salesman is an **expert sheep man**. We are in touch with the **lamb feeders** of the Colorado feed lots and are prepared to finance feeding transactions in this section. Also are prepared through our Associate Company, The American Live Stock and Loan Co., to make **liberal advances on sheep stopped for summer grazing purposes on Tennessee Pass, or other mountain grazing districts in Colorado**. Both **Swift and Armour** buy sheep and lambs at **Denver** for local killing and shipment East.

We also have the best feeder outlet in the United States through the Denver market to the Colorado feed lots.

WRITE US

American Commission Company
Stock Yards, Denver, Colorado

A. E. De RICQLES, President

J. F. GRIEST, Manager

WM. J. WULFF, Sheep and Lamb Salesman

Continental Life Insurance Company

F. J. HAGENBARTH, President
H. C. EDWARDS, General Counsel
W. S. McCORNIC, Treasurer

McCORNICK BUILDING
Salt Lake City, Utah

H. N. MAYO, Medical Director
C. W. HELSER, Supt. of Agencies

The **CONTINENTAL** is a Life Insurance Company distinctively **OF and BY and FOR the West**. It has **\$15,000,000.00 OF INSURANCE** in twelve Western states and over **A MILLION AND A QUARTER DOLLARS** invested in those states principally in first mortgages **ON WESTERN FARMS AND RANCHES**.

Below are given the names and address of some **AMERICAN GENTLEMEN** who represent this Company as **ITS AGENCY MANAGERS**

J. H. WOOD,
510-12 Boston Bldg.,
Salt Lake City, Utah.

F. F. FINLAYSON,
Idaho Falls, Idaho.

EDWARD MacCLAIN,
233 Henry Bldg.,
Seattle, Wash.

KLITGAARD & NYMEYER,
508 Mer. Bank Bldg.,
San Francisco, Calif.

G. W. WOLFE,
P. O. Box 221,
Walla Walla, Wash.

C. E. SNYDER,
Dillon, Montana.

JOHNSON & BEAN,
Richfield, Utah.

W. L. KELLER,
Merino Bldg.,
Boise, Idaho.

JAMES E. McGOWAN,
No. 25 Elmwood Apts.,
Portland, Oregon.

ED. FLETCHER,
920 Eighth Street,
San Diego, Calif.

R. A. SILL,
S. 1304 Brown St.,
Spokane, Wash.

CHARLES M. REICH,
930 Foster Bldg.,
Denver, Colo.

The National Wool Grower

Published Monthly by the National Wool Growers' Association Company
(Incorporated)

Published at 718 McIntyre Bldg., Salt Lake City, Utah

Edited by the Secretary

Subscription One Dollar Per Year. Entered as Second-Class Matter January, 1913, at the Post Office at Salt Lake City, Utah, under Act March 3, 1879.

DRASTIC QUARANTINE.

On account of the prevalence of foot and mouth disease in eastern states, rigid quarantine regulations have been issued by Wyoming, Arizona, New Mexico and Texas, preventing outside sheep and other ruminants from entering any of these states.

We do not wish to be understood as advocating any carelessness in dealing with foot and mouth disease, but such drastic quarantine regulations as these are entirely unnecessary, and, if persisted in, will bring irreparable injury to our western livestock industry, including the states that have imposed them.

Approximately 200,000 sheep from Idaho and Utah go into Wyoming every season to graze in the National Forests. These sheep have established rights on Wyoming forests, and have no where else to graze, just as 100,000 Wyoming sheep have established rights in the forest of Colorado. To prevent their crossing of state lines means ruin to their owners with no benefit to anyone else for no one else can obtain these ranges. Also these regulations will end the traffic in rams. The sheepmen of Wyoming, Arizona, New Mexico and Texas annually buy thousands of rams in adjoining states, which privilege will now be denied them. As these rams cannot be had at home, great injury will result to all concerned.

States that live in glass houses should not throw stones. If Wyoming has a right to shut out all outside

sheep, then Colorado has a similar right. Suppose Colorado should attempt to do this, where would Wyoming's feeding lambs find a market next fall. Suppose Nebraska should, like Wyoming, say that no sheep in transit shall stop for feed in that state, where would the Wyoming flockman then market his lambs. If Arizona has a right to shut out all sheep, so has California, but if she would do so, Arizona would find no market for her lambs. Such absolute quarantine regulations are double-edged swords, and they have a habit of spreading to surrounding states with much rapidity.

Foot and mouth disease was recognized in the East last October. Since that date a vigorous fight has been made against it, and it is now practically eradicated. If it was necessary for these western states to impose such rigid quarantine against outside stock, the time to do it was last fall when the disease was prevalent in the East and not now when it has disappeared. If these quarantines are now necessary, then the livestock sanitary authorities of these western states stand convicted of gross negligence in not imposing them six months ago. They were not necessary then, and they are absurd now.

We are fast reaching the conclusion that this whole subject of animal diseases should be placed under the absolute control of the United States Bureau of Animal Industry instead of being divided up between forty-eight states, each with different regulations and much politics in their enforcement. Livestock is always a subject of inter-

state commerce. The sheep that are in Wyoming today may be in Nebraska tomorrow, and the only authority broad enough and big enough to protect the health of the livestock of all the country is the United States Bureau of Animal Industry. Each state has different quarantine regulations, and the shipper passing through the country with livestock needs the constant advice of a Philadelphia lawyer to keep him from the meshes of the law. Anyway, when any serious livestock disease prevails, we always call upon the Federal Government to eradicate it. It was so with sheep scab, cattle scab, durine, Texas fever, foot and mouth disease and hog cholera. Why not settle this whole matter by giving the Federal Government full jurisdiction over all animal diseases, and let every state maintain a livestock sanitary board to act in an advisory capacity. This will be taken as a radical view by many, but when a state like Wyoming goes so far as to say that a shipper passing through that state will not be permitted to unload his live stock to feed, rest or water, the time has come to call a halt, and we believe that an agitation should be started immediately to place this whole question of animal disease under the jurisdiction of the Federal Government.

In the meantime if these states insist upon the enforcement of outrageous quarantine regulations, we believe that the Supreme Court of the United States if not other courts, will grant relief from them.

FREIGHT ADVANCE SUSPENDED

Our readers are familiar with the efforts of railroads to advance their freight rates on livestock in April, 1914, and how this advance was suspended by the Interstate Commerce Commission until March, 1915, and the case was tried in Denver last August by the National Wool Growers' Association and other livestock organizations. We are now advised that the proposed advance has been again suspended until June 30, 1915. We had

hoped for a decision in this case early this year, but for some reason or other it has not been forthcoming. In the meantime the old rates are in effect and western sheepmen have saved over \$200,000.00 by preventing this advance.

HOW TO PREPARE THE CLIP.

We had hoped that this year would see a radical change in our methods of preparing wool for market, but it now appears that the bulk of our wool will be handled as heretofore. So far as we can see the only improvement in sight will be the grading of a few million pounds of wool at the shearing pens by the National Wool Warehouse and Storage Company. Already the Warehouse has several graders in the West and a few clips have been graded, notably that of McGill and Adams of Ely, Nevada, and a few of the early clips around Rawlins, Wyoming. Probably altogether the Warehouse will grade about 7,000,000 pounds of wool, most of which will be in Western Wyoming. We had hoped that three times this amount would be graded, but high prices and early sales have intervened. However, the system will be started and will, we think, clearly demonstrate that grading is the best system for western woolgrowers to adopt.

In the meantime the man who puts up his own wool should use every care to see that it is honestly packed. The shearing shed should be kept clean, and all foreign matter rigidly excluded from the wool. Tags, black wool and bucks' wool should all be packed separately, and the different grades of wool should be kept separate so far as possible. All fleeces should be tied with paper twine and after shearing all sheep should be branded with Kemp's Branding Fluid.

Before shearing and during shearing sheep should be kept away from dusty trails and corrals, and every effort should be made to keep the wool clean, bright and attractive. Of course it is unnecessary to mention that sheep should not be shorn when wet nor the wool allowed to become

wet after shearing. In every case where wet wool is to be sold, it is the common duty of the seller to honestly advise the buyer of the exact condition of the wool. A woolgrower, who would deliberately misrepresent the character of his wool in this respect is not entitled to a square deal from the wool trade, and we do not imagine that he will get one very long.

Woolgrowers are receiving good prices for this year's wool and they can well afford the expense of having their wool graded for them by the Warehouse. It may be many moons before we have a better opportunity to adopt improved methods.

CARPET WOOLS.

Certain kinds of carpets are made of wool or partly of wool. Wool for this purpose must be coarse and stiff. In fact the best carpet wools are seemingly a cross between wool and hair. For carpet making Merino wools are too soft to use. Years ago the world produced enormous quantities of carpet wool, but today the supply comes chiefly from China and Asia with limited quantities from South America and Europe. Fifty years ago all countries except Australia produced much carpet wool. In fact some carpet wool was produced in the United States, but the supply has now dwindled until only a small amount comes from the Indian Reservations of Arizona. In past days carpet wools were the lowest in price, selling as low as 3 and 4 cents per pound. Now, however, scarcity is forcing up the price until the best carpet wools bring about as much as poorer grades of clothing wool. In fact a part of the advance in these high priced carpet wools comes because the best of them may be used in making low grades of clothing.

Sheep that produce carpet wools represent the primitive type; those that have not been improved by modern methods of breeding. In addition to producing a lowpriced wool, these inferior sheep yield a fleece of only 2 or 3 pounds, hence there is no place for them in progressive countries. It is

just this fact that is bringing about the advance in carpet wool price. Nations are becoming progressive and as they improve their sheep the quantity of carpet wool declines. China and Asia, however, have made no improvement in their sheep within recent times, and in the future most of the carpet wools will come from that source. The supply, however, is limited, and the demand is increasing, and it is not beyond reason that prices for this grade of wool may reach a point where civilized countries would find it profitable to breed carpet wools. Of course, if such time should come, we would not revert to the primitive type, of sheep from which such wool is now obtained, but on the other hand would produce it from some of the breeds we now have. A few years of selection would place on the Lincoln or Cotswold a fleece coarse enough for carpet purposes. This change will come when prices justify it and not before.

LAMB FEEDING IN COLORADO.

Recently this paper requested Roscoe Wood to visit the feed lots of Colorado, and give his observations through these pages on the lamb feeding operations as there carried out. Late in February, Mr. Wood made this visit and in the pages of this issue he presents his first story on lamb feeding. This story will be continued in the May National Wool Grower, and we urge our sheepmen to follow it closely.

Lamb feeding has been brought to its highest development around Fort Collins, Colorado. Hence the importance of studying it at that point. This paper feels that western woolgrowers have neglected lamb feeding in many sections. It believes that many breeders who are favorably located could feed their tail-end lambs with greater profit to themselves than marketing them in an unfinished condition. With the thought of encouraging lamb feeding in different sections, this series of articles is being presented.

t
-
s
y
l
-
t
e
t
-
d
r
t
t
f
e
e,
v
d
s
-
r
r
ll
t

o
-
l-
s
l-
t.
e
s-
b
d
r,
it

o
rt
t-
is
s
y
l-
d
er
g
h
l-
of



April

Si

been

grove

ary

track

pound

from

cent

1 a

purc

Was

take

fine

In

clip

cent

have

state

In

beg

cula

wood

in s

the

Stat

B

supp

Stat

on

Sinc

port

equi

wood

wood

were

of i

1915

they

Eur

of

poun

1915

less

the

indi

estim

to 3

the

est

forti

at a

poun

equa

wood

THE WOOL SITUATION.

Since our last issue very little has been doing in wool so far as the wool-grower was concerned. From January 1 to April 10, there has been contracted in the West about 7,000,000 pounds of wool. Prices have ranged from 18 cents for heavy fine to 30 cents for light crossbreds. Since April 1 a small amount of wool has been purchased. Around North Yakima, Washington, 600,000 pounds have been taken at from 18 to 21 cents for heavy fine and 24 to 26 cents for crossbreds. In Western Oregon a few crossbred clips have been taken at from 24 to 26 cents. So far as we can learn there have been no sales in other western states.

In the latter part of March, buyers began to bear the market and to circulate reports that an oversupply of wool was in sight. We take no stock in such predictions and here set forth the exact situation so far as the United States wool supplies are concerned.

Beginning on January 1st, the total supply of unsold wool in the United States was 33,327,491 pounds less than on the same date the year previous. Since January 1st, this country has exported wool and manufactures of wool equivalent to 20,000,000 pounds of wool. The imports of manufactured wool into the United States in 1914 were worth \$33,519,799.00. The value of imports of manufactured wool for 1915 will not exceed \$18,000,000.00, if they are that heavy, on account of the European War. Each dollar's worth of imports represents around $2\frac{1}{2}$ pounds of greasy wool; therefore, in 1915 we will import 39,000,000 pounds less wool in the form of cloth than was the case last year. All reliable sources indicate a shrinkage in our 1915 clip estimated anywhere from 20,000,000 to 30,000,000 pounds. We think that the 20,000,000 pound shrinkage is nearest accurate. Using the figures set forth above, without including imports at all, we find a shortage of 92,000,000 pounds in our 1915 wool supply. This equals about 17 per cent of the total wool consumption of this country.

Let us now deal with the imports of wool and see if there is any possibility of this deficiency being made up from that source. All the South American clip has been sold. At the close of the wool year in February, Boston wool papers, that are usually well informed, estimated that American buyers had purchased 36,000,000 pounds in South America. They now estimate that our purchase were 60,000 bales, equal to 55,000,000 pounds. Assuming that the larger figure is correct, our imports from the South this year will not be above the average. Last year we imported from South America 48,000,000 pounds of wool, and in 1909, we took 58,000,000 pounds from the Argentine alone. We need not, therefore, be alarmed about this year's purchases as they are in no way unusual

Let us keep up the Coyote campaign by each sheepman hunting dens. The dens are easily found at this season and contain from 5 to 8 pups, as well as the old coyote.

except, that on account of the shortage of wool in Boston, they are being rushed to this country more rapidly than ever before. However, if the Argentine wools come in in March, April and May they will not come in later in the season as is usually the case. Also these Argentine wools have cost our buyers from 4 to 7 cents per pound more than formerly.

Great Britain produces annually about 130,000,000 pounds of wool, all of which comes from the Down or coarse wool breeds. Last year the United States took 10,360,000 pounds of this washed English wool, equivalent to twice that amount of domestic wool of the same grade. This year not a pound of English wool can come to

the United States as Great Britain is using it for war purposes. Moreover, English wools are now selling in London from 6 cents to 8 cents a pound higher than at this date last year. Ninety per cent of the wool clip of New Zealand is crossbred, and its exportation is prohibited and will continue to be. Already two-thirds of the New Zealand clip has gone into consumption at high prices. Last year the United States purchased 25,139,084 pounds of New Zealand wool. This year we are not getting a pound as its exportation is prohibited.

About 30 per cent of the total Australian clip is crossbred. We have always bought a few million pounds of this crossbred wool; this year not a pound can come here. There is no doubt that our buyers have bought more Merino wool in Australia this year than in any year since 1909. It is estimated that our purchases there amount to 60,000 bales or 20,000,000 pounds more than last year. This is all fine Merino and is bought so as to cost from 66 to 72 cents clean, laid down in Boston. Also it is poorer wool than has come from Australia for many years, and the most of it is so soft and weak that it cannot be worked except by blending with American wools. Further, it is one thing to buy wool in Australia and another thing to ship it. A small quantity of Australian wool has been shipped, but the cost of transportation is high and there is no certainty as to when the balance of the purchases can be moved if they are moved at all.

We ordinarily buy much Australian wool in London. This year from January 1 to April 1, we have purchased 19,400,000 pounds of wool in London as against 55,770,000 pounds purchased there during the same period last year. More important is the fact that while our London purchases are about one-fourth of what they were last year, not 20 per cent of what we have purchased has actually been shipped, while all of last year's wool was shipped.

Last year we bought about 2,000,000 pounds of Merino wool in Africa. This year we have bought some, we do not

know how much, and it is costing 60 to 66 cents clean laid down in Boston. It is not equal to our wool in character.

In connection with the purchase of wool in Australia, London and South Africa, we must remember that it is all Merino wool, that not a pound of it can be shipped out of its country without a license, and that every pound was bought with the understanding that Great Britain had the right to countermand the purchases if it was found the wool was needed for war purposes. Licenses for these exportations are being issued very slowly, and the London papers state that the reason for this delay is that it appears to Great Britain that she will probably need the entire wool clip of Australia and South Africa to clothe the army, and she is, therefore, issuing licenses very slowly so as not to let much wool get out of her control. The wool buyer is also very much alarmed for fear that Great Britain is going to need this wool and that is the reason he is making frantic efforts to get it out of those countries.

We have here given the true facts in regard to the wool supply of this country. These facts indicate that there is no place in the world from which the United States can obtain crossbred wools except from the American woolgrower, and that under the most favorable conditions possible the supply of crossbred wool is not going to be sufficient to meet the demand. Such wool must, therefore, sell at a high price. While a considerable volume of Merino wool is in sight abroad let us not forget that it is going to cost more than usual when laid down in Boston, and that there is no certainty that it can be brought to this country at all.

WASHINGTON WOOL SELLING.

H. Stanley Coffin of North Yakima, Washington, sends us the following wire April 10th: "About 600,000 pounds of Washington wool has been sold to the American Woolen Co.'s mills. The crossbred wools have brought from 24 to 26 cents. The fine

wools from 18 to 21 cents. Growers are holding out for high prices, and just now nothing is being sold nor has been for the last week. Our wools are brighter than usual, and our sheep are shearing from one to two pounds less than last year.

"I have sold to a Wyoming man 2,200 head of the best half-blood Lincoln ewes that ever left this country."

THE WYOMING QUARANTINE.

On April first the Governor of Wyoming issued a quarantine prohibiting any sheep from other states from entering the State of Wyoming. About 200,000 sheep owned outside of Wyoming have grazing rights in the National Forests of Wyoming. These rights are well established and generally recognized. This quarantine would prevent these sheep going to their summer ranges. This quarantine also specifically prevented any sheep in transit through the state from unloading in Wyoming for feed, rest and water under the provisions of the twenty-eight hour law. All the sheep of Southwestern Montana, Idaho, Nevada, Oregon and part of those of Utah must pass through the entire length of Wyoming to reach the markets of Chicago and Omaha. As the run cannot be made through Wyoming in either twenty-eight or thirty-six hours, the enforcement of this quarantine would deprive millions of sheep and lambs of their customary markets.

As soon as this quarantine was issued, the National Wool Growers Association, as well as governors of several western states, made a protest against it and asked for its modification. We are now advised by the Wyoming Governor that arrangements will be made so that sheep having ranges in Wyoming will be allowed to go to them if accompanied by a Federal certificate of inspection. He also advises that some arrangements will be made to permit sheep in transit through the state to unload in quarantined yards. The National Wool Growers' Association is still working on this matter and hopes before the shipping

season opens to have this quarantine so modified that stock in transit will be allowed to move without restrictions of any kind.

Certainly this quarantine is beyond all reason and we imagine the courts would so hold.

ADDITIONAL ENTRIES FOR RAM SALE

Since the cover of this paper was printed, we have received from the Butterfield Live Stock Company entries for the ram sale for 250 Rambouillet rams, both range rams and stud rams and 250 Hampshires, including some ewes, some stud rams as well as some range rams. These entries will be listed in the next National Wool Grower.

ARGENTINE WOOL CLIP AND PRICES

According to La Prensa of Buenos Aires the 1915 wool clip of Argentina will yield 85,000 bales, which, if current prices are obtained, will produce \$19,000,000 United States currency. Never in the business history of these countries has wool realized such high prices as are now being paid, due entirely to the urgent need for this raw material in certain of the countries engaged in the war in Europe. Although this year the wool clip is less in quantity than last year, its greater value compensates for this shrinkage, so that the proceeds should amount to about the same as last year's.—Consular Report.

STILL PAYING BOUNTY.

Lincoln county is the most western county in Wyoming and borders on Idaho and Utah. The woolgrowers of that county have a good organization, and last December they offered a bounty of \$2.50 on coyotes killed within Lincoln county. Up to April first, 1,400 coyote pelts had been presented for bounty. In addition a number of wolf and wild cat pelts were turned in. The money for payment of this bounty amounts to over \$3,600.00 and was rais-

ed by an assessment on the sheep of members of the Association.

Recently in speaking about this bounty, J. D. Noblitt of Cokeville, Wyoming, said: "The payment of this bounty has been a fine move and now that the coyotes have been reduced, we should keep up the bounty. Fourteen hundred coyotes killed in one county means the saving of thousands of lambs. This money has been well spent and will return manyfold to every sheepman in this section."

TO PROMOTE SHEEP BREEDING IN WASHINGTON

One of the most valuable features that will be incorporated into the Cascade International Stock Show, to be held at North Yakima, Washington, November 22nd to the 27th, 1915, will be the distribution of bred ewes and feeder cattle in small lots to the farmer on a small acreage. The Association feels that at the winter show will be an appropriate place where the breeder and buyer may come together and do business with mutual profit to each other.

The plan that has been informally discussed by stockmen to furnish sheep and cattle as feeders to the ranchers in such numbers as are wanted, would undoubtedly meet with pronounced favor among the latter. The possibilities of the plan are very great, and it would appear now that it will be given a definite trial in the coming fall and winter.

The sheepmen are considering the distribution of a large number of bred at the market price in such numbers as are desired, say from 10 to 100. These ewes will lamb early. In the spring the rancher will get the wool clip from the ewes, and can then sell the ewes for mutton. He will keep his lambs to work them off on the early market at top prices.

The ranchers of the valley can handle thousands of sheep in this manner. It is pointed out that he has the chance for a triple profit. In the first place, the wool clip; in the second place, the advance price he should receive for his fat ewes; and in the third

place, a good round profit on the lambs.

The cattle men are planning something similar in furnishing feeders to the ranchers. These animals would be fattened by the ranchers, who would take their profit on the increased weight.

It is also proposed to work out a plan whereby the banks will finance those ranches who need assistance until they are able to fatten and turn the stock back to market.

S. B. NELSON, Sec'y.,
Cascade International Stock Show.

AVERAGE WEIGHT OF FLEECE.

In one of the eastern sheep papers

around 35 per cent of all the sheep in Australia are wethers, and wethers should shear 3 or 4 pounds more wool than breeding ewes. If we deduct the weight of wether wool from the Australian average, it would leave the Australian ewe producing about 6½ pounds of wool.

In western United States our sheep averaged last year 7¼ pounds of wool. And this was one of our light years. Not to exceed 5 per cent of the sheep in the West are wethers, consequently this 7¼ pounds average fleece comes almost entirely from ewes, which shows that our ewes are producing more wool than the Australian.

In the western United States our



GRADE RAMBOUILLETS IN THE LOT OF COCK & BENNET,
BELLE FOURCHE, SOUTH DAKOTA

for March is the following: "In Australia a ewe must shear ten pounds or she goes to the butcher." We have heard such a statement as this made rather recklessly through the West during the past year. It is just as far from the truth as it is possible to get. In Australia neither range ewes nor stud ewes shear any more than they do in the United States, if they shear as much. The average weight of fleece for all Australian sheep in 1914 was 7.87 pounds and this is the highest average weight ever recorded in that country. The year before, Australian fleeces averaged only a little over 7 pounds. Also let us not forget that

stud Merinos average just as heavy fleeces as the best Australian stud Merinos. Australian flocks of stud sheep average from 10 to 13 pounds of wool and practically all stud flocks in this country will come within those figures. So far as weight of fleece or size or confirmation of sheep are concerned, this country has nothing to learn from Australia.

The motto of some woolgrowers is "every fellow for himself and the devil take the last one." The one good thing about this motto is that the devil usually gets the fellow that operates on that basis.



Don't Feed Your Last Year's Crops Into Idle Horses

You can save expense by selling those extra horses and getting a tractor that stops eating when it stops work. You can also raise bigger crops by plowing deeper and doing all your work in the best way at just the right time.

Why Avery Tractors and Plows Are Selling So Fast and Doing Such Good Work

Lightest Weight Tractors of any considering draw-bar efficiency—also simplest tractors—built so strong there's almost no wear-out to them. Avery "Self-Lift" Plows save you a man. 5 sizes—all built alike—they make Tractor Farming successful on any size farm—large, medium or small. Proven by every test known. Backed by strongest guarantees. Built by a company with experience and a large factory, and one that stands behind its machines to the limit.

Learn All About Tractor Farming

Other farmers have proven that it pays big. Why shouldn't it pay you too? Write for the Big 1915 Avery Tractor and Plow Catalog, crammed full of Tractor Farming Facts.

LANDES & COMPANY

WESTERN AGENTS

2nd W. and So. Temple St., Salt Lake City

SHEEP SUPPLY STATISTICS.

March receipts of live muttons at the principal western markets were considerably lighter than a year ago. A statistical statement follows:

	1915	1914	Increase or Decrease
Chicago	259,080	460,401	-201,317
Kansas City	152,877	153,166	-289
Omaha	265,447	252,532	+12,915
St. Louis	25,899	14,234	+11,665
St. Joseph	114,859	95,677	+19,182
Sioux City	11,227	27,502	-16,275
	829,393	1,003,512	-174,119

The decrease was practically all at Chicago and was caused by stoppage of Colorado stuff at the Missouri River owing to the embargo on eastern shipments at Chicago. Another factor was emptying of feedlots east of the Missouri River early owing to foot and mouth disease and the fact that the feeder movement in that territory has been suspended since last November. Had Chicago been able to fill eastern orders Colorado business would have followed the usual channel.

Another handicap under which Chicago labored was fear by finishers to

put their stuff into near-by feed barns owing to constant danger of tie-up by quarantine.

Receipts at western markets during the first three months of the current year follow:

	1915	1914	Increase or Decrease
Chicago	877,312	1,403,417	-526,105
Kansas City	464,210	451,787	+12,423
Omaha	716,291	699,167	+17,124
St. Louis	133,753	151,324	-17,571
St. Joseph	283,144	240,462	+42,682
Sioux City	80,822	111,411	-30,589
	2,555,532	3,057,568	-502,036

FEED LOT GAINS WERE POOR.

"At the beginning of April, there were approximately 200,000 lambs back in northern Colorado feed lots," said C. H. Shurte, "and the bulk of them will have moved by May 1st. Practically everything will be out by May 15th. Feeders marketing stuff late have made some money, a profit of \$1.00 per head being common, but early shipments lost money. Since lambs crossed the \$9.00 line feeders have been doing well.

"Inquiry develops the fact that gains have been poor. While this may have been caused to some extent by skimping grain, that was not the only influence as feeders who did not stint make the same complaint. During March feed lots were either deep in mud or buried in snow which was a handicap. Colorado feeders are in good shape financially, however.

"In Idaho the early lamb crop was large and in fine shape. Oregon and Washington both report large percentages.

"Texas sheep are a month late and will be bunched, all available information indicating a light run.

"Breeding stock is at a premium. In Oregon ewes have changed hands at \$7.00 and a prediction of \$10.00 is made. Few lambs are being contracted, but \$5.75 bids would probably start trade.

For \$5.00 per year the National Wool Growers' Association will do everything for you that any Association can do.

\$35 To Los Angeles AND San Francisco

Round Trip
from
Salt Lake City

Tickets on Sale Daily
Three Months Limit
Stopovers and Diverse Routes
Three Daily Fast Trains
8:45 a. m., 5:00 p. m., 11:50 p. m.

\$4.00 Round Trip
Los Angeles
to
San Diego
Ocean Trip on
Steamers
Yale and Harvard

Ask for Exposition Booklets
City Ticket Office 10 East 3rd South
Phones Wasatch 3501-3502

J. H. MANDERFIELD, A. G. P. A., Salt Lake City

VISIT BOTH EXPOSITIONS



PACKERS WANTED THE WOOL.

Rarely has such a wide gap between shorn and woolled sheep and lambs been consistently maintained as this season. Packers have been selling pulled wool at good prices as fast as it was dry and have offered feeders inducement not to shear by paying anywhere from 75 cents to \$1.50 per cwt. more for fleeces than shorn stock. The result is that only a handful of shorn stock has been on the market. Colorado feeders rarely take off wool, especially in the case of Mexicans, and this year stuff finished at stations near Chicago has been hastened to market at the first possible moment owing to fear of quarantine tie-up. All the wool dealers will get at the shearing stations will not fill a one-seated buggy.

J. E. P.

GOOD IN WEST TEXAS.

I am glad to report stock of all kinds down here have had a splendid winter. With recent fine rains and the ground covered with winter weeds, I don't suppose we have had finer prospects in many years for the lambing and fattening season.

We have 3,200 bred ewes to commence lambing the 20th of March.

I am very optimistic over the outlook. With best wishes to yourself and the National Wool Grower, and assuring you we are doing all we can to get new members and subscribers.

M. A. SHERBINO.

Big Lake, Texas.

ARIZONA GRAZING LANDS.

We are advised by William Peterson, superintendent of the Fort Patche Reservation in Arizona that a million acres of good grazing land will be open to permits August first. It seems that the old permits for grazing on these reservations expire July 31st. On this land there are now grazing 23,000 cattle, 53,000 sheep and there are 28 different ranges. The grazing on this reservation is let by contract after bids are received.

NEED THE HEAVY LAMB.

Owing to the scarcity of sheep, the heavy lamb has been getting better market action, recently selling closer to handyweights. With wool high, the big lamb has a distinct advantage and as a matter of fact, much of the discrimination packers practice is unwarranted.—J. E. P.

WANTS POSITION IN THE WEST

I wish to secure a position as sheep herder this summer somewhere in Colorado, New Mexico or Wyoming. I

have had one year's experience as a herder, I would be able to commence work by the first of June. If I cannot get a position herding, I will accept any kind of a job at all in the western country.

CALVIN C. GELWICK,
Ulysses, Nebraska.

HAVE POOLED THEIR WOOL.

Several hundred thousand pounds of wool is grown around Rexburg, Idaho. The sheepmen of that section have pooled their clip and appointed an agent to sell it at the proper time.

THE BEST SERVICE

FOR BANKS AND STOCKMEN
HAVING ANY TRANSACTIONS
AT THE CHICAGO LIVE STOCK
MARKET IS SECURED BY AN
ACCOUNT WITH

THE LIVE STOCK EXCHANGE BANK
OF CHICAGO

"THE BANK OF GOOD SERVICE"

CAPITAL \$1,250,000

RESOURCES \$15,000,000

COTTONSEED CAKE AND MEAL

PACIFIC COTTON CO.
MIDBERRY COTTON OIL CO.
CALEXICO, CALIFORNIA

MAKERS OF COTTONSEED CAKE AND MEAL

BALFOUR GUTHRIE & CO.
SELLING AGENTS

Los Angeles : San Francisco : Portland : Tacoma
Seattle : Spokane : Boise

SEND FOR OUR BOOKLET ON THE USE OF COTTONSEED

Stewart Shearing Machines

We furnish complete equipments including Gasoline Engine and all accessories.

WRITE FOR PRICES

Full line of Stewart Combs, Cutters and extras.

Little Wonder Outfits, with or without Magneto

Western Agents for **Kemp's Branding Paint, Cooper's Sheep Dip
Cooper Wool Baler. Fleece Twine. Wool Bags.**

The Salt Lake Hardware Co.

WHY DIP TWICE?

Prof. Swingle, in Wyoming State Experiment Station Bulletin, entitled "Eradication of the Tick," says:

"I have seen large flocks of sheep practically if not entirely freed from ticks by a yearly dipping in Cooper Powder Dip."

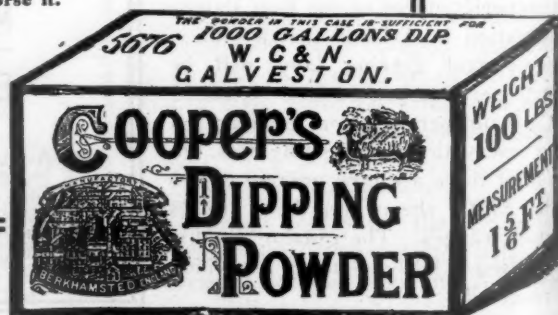
Use Cooper's Powder Dip—one dipping will kill the ticks—and prevent fresh attacks. The protection against fresh attack is worth the cost of the dipping.

Used everywhere.
Most Governments endorse it.

Write for Service Bulletin—"The Sheep Tick"
—FREE—to

WILLM. COOPER & NEPHEWS
152-154 West Huron St., CHICAGO, ILL.

Utah Distributing Agents: Salt Lake Hdware Co., Salt Lake City
Montana Branch: C. F. Wiggs, Manager, Billings



INCREASES PACIFIC COAST DEMAND

The British embargo on Australian and New Zealand frozen mutton has exerted a stimulating influence on Pacific Coast trade forcing butchers in that quarter to buy heavily in the Intermountain winter feeding region. Much Nevada, Idaho and Montana product has been diverted from eastern markets in that some 40,000 ewes and wethers of the Pope feeding in the Yellowstone Valley, Montana, went to Portland and Seattle on this account, that would have been sent East had the Pacific Coast markets been getting their usual quota of imported meat.

PRICE RECORD FOR MARCH.

The top price on lambs at Chicago in March was \$10.10 and on sheep \$8.40. Sheep averaged \$7.50 and lambs \$9.60. The bulk sold at the following ranges by weeks.

Week ending	Bulk of Sheep	Bulk of Lambs
March 6	\$7.25@7.90	\$ 9.25@ 9.90
March 13	7.25@7.90	9.25@ 9.90
March 20	7.00@8.00	9.15@ 9.85
March 27	7.00@7.75	9.25@10.00

Average and top prices by weeks follows:

	Sheep		Lambs	
	Top	Aver.	Top	Aver.
March 6 ...	\$8.00	\$7.50	\$10.00	\$9.65
March 13 ..	8.00	7.60	10.00	9.55
March 20 ..	8.00	7.50	10.10	9.65
March 27 ..	8.40	7.50	10.10	9.65

LAMBS REACH \$11.00.

Early in April Colorado lambs reached \$10.25 and an \$11.00 market for wooled stuff is confidently predicted. Colorado feeders, who have been loading about 300 cars weekly have decided to reduce shipping 33 per cent, which will string the visible supply out until the middle of May. The Northern Colorado jag constitutes nearly everything in sight, and feeders thereabouts have the market in their own hands. A year ago the cornbelt states were full of stock going through shearing pens, but this year there will be only a handful to come from that source.

AN ACCUTE SCARCITY PERIOD

April and May promise to witness the lightest run of live muttons in many years. At the beginning of April the only visible supply of any considerable volume was in Northern Colorado and the bulk of the stuff in the Greeley district had already been shipped. East of the Missouri River nearly everything was gone, Iowa, Illinois, Michigan, and Indiana farmer feeders retaining only a corporals guard. All winter nothing went into Chicago territory proper and the second hand stuff that usually feeds the market hopper early in the spring will be missed by packers. The miniature jags received by Buffalo and Pittsburg constitute a joke.

At the beginning of April prices were at the highest level of the year. At Omaha lambs reached \$10.10 and \$9.95 was paid at Kansas City. At Chicago \$10.25 was quotable for prime Mexicans, indicating that Missouri River markets were relatively high. Choice wethers were quotable to \$8.50 and ewes to \$8.25.

Scarcity does not always insure lofty prices, the purchasing capacity of the consumer being an important factor but the next 60 to 90 days will demonstrate whether or not the mutton and lamb eaters of the United States are willing to pay luxury prices.—J. E. P.

SMALL MEAT CONSUMPTION.

Meat consumption of all kinds has been materially reduced by industrial depression. Mechanics and laborers by the thousand are not on the pay roll, and cannot eat meat when in that condition. The German embargo has imposed the necessity of blockade running on exporters, throwing tons of product into cold storage at New York that would otherwise have gone across the Atlantic. The whole situation, viewed from any possible angle, is adverse to the producer, and little relief is on the horizon. Packers are disposed to take advantage of every trading opportunity, regardless of the

interest of the feeder and breeder, the policy of the killer being to "git while the gitten's good."

That meat distribution is in the hands of the few, is everybody's secret, but it is a condition not likely to be ameliorated, and the producer must accept the system, his only alternate being a declaration to play the game.

Subscribers and members are what we want.



These illustrations show the type of OUR RAMBOUILLETS and HAMPSHIRE. We offer 500 Hampshire ram lambs dropped in February.

OUR RAMBOUILLETS have been bred for 20 years for wool and mutton. We have as much mutton and more wool than most Rambouillet flocks. 1500 rams for sale; also 500 crossbred Rambouillet-Lincoln Rams.

Cunningham Sheep & Land Co.
Pilot Rock, Oregon



SHORTAGE IN DOMESTIC WOOL CLIP

As R. B. Thomson of the National Wool Warehouse figures it. There will be a shrinkage of about 30,000,000 pounds this year in the wool clip of Ohio, Michigan, Indiana, Illinois, Wisconsin, Minnesota, Iowa and Missouri. There is also a big shortage in the quantity of wool taken off at railroad feeding stations as not to exceed 25 per cent of the usual number will be shorn, as the stock handled there is going to market in the fleece, packers paying a premium for wooled stock. Discussing the prospect, Mr. Thomson said:

"Shortage of wool is not generally understood. We know now that the drouth in Australia last season caused a decrease of eighty to ninety million pounds in the clip there not to speak of our domestic shortage. In addition to this, new factors calculated to strengthen prices are constantly developing. Eastern markets are dull, and there is a concerted effort to talk down prices, but no change in basic conditions has accrued to warrant such revision as manufacturers and dealers demand.

"Owing to the large quantity of wool, packers are getting on account of the premium on fleeced stock, dealers will be deprived of handling a lot that normally goes to their lofts, leaving them free to secure supplies elsewhere.

"The extraordinary strong position of low and medium wools throughout the world must inevitably strengthen values of Merinos."

RANGE DESTROYING RODENTS

The district forester at Portland, Oregon, announces that a report has recently been completed upon a study made last summer and fall to determine the amount of damage done by rodents, notably the pocket gopher. The study was made by the Biological Survey, and the area chosen for the investigation was upon the Ochoco National Forest in central Oregon. The

facts brought out by the study are somewhat startling.

It has been known to the Forest Service for some years that certain areas had the appearance of being overgrazed, but it was not until a more intensive study of the range was made that suspicion turned toward the pocket gopher so frequently seen in these localities. As a result of the study of the ways of these little animals, it is safe to say that on many areas 50 per cent of the grazing value of the range is destroyed by their work.

This destruction is brought about in three ways: First, by the actual food which they consume or store away, which consists of the roots of various grasses and forage plants. In one store-room alone over 1,000 bulbs of the melica or bulb grass were found. Second, the mounds of earth thrown out by the gopher cover considerable forage. This may appear of small consequence, but each mound will average a square foot in size. On one area there was found an average of 8,800 mounds to the acre. This means that one-fourth of each acre was rendered valueless. Third, their system of burrowing countless runways fairly undermines the ground, increases the friability of the soil, destroys the root systems of the plants above, and when stock in bands passes over the ground, it is as badly torn up as if it had been plowed.

After having ascertained these facts, the agent of the Biological Survey set about a method of combating the pests. Pieces of sweet potato, seasoned, with a preparation of sugar and strychnine, were placed in the gopher runways by means of a long pointed stick. In going over the area a second time, it was found that from 95 to 100 per cent of the gophers were poisoned the first round. Those that survived the first dose of poison would soon throw up fresh mounds and could be easily detected and poisoned later.

RUSSIAN WOLF HOUNDS FOR SALE. They are the boys that will keep the coyotes away from your ranch. They are a beautiful dog, make a good companion and are friendly to everything except wolves and coyotes. Write for prices and particulars
E. C. LEAK, McGill, Nevada.

SHEEP RANCH FOR SALE

I offer for sale one of the best sheep ranches in northeastern Wyoming. Ranch consists of 1200 acres of deeded land and six sections of leased land so located as to control eight miles of water. Ranch cuts annually 300 tons of wild hay and has ample range for four bands of sheep or 2000 head of cattle. Will sell sheep with ranch if desired and now have 3600 ewes ready to lamb. This ranch lies at an elevation of 3500 feet on the Little Missouri River and is located in sagebrush and gumbo country that will always be open range. Full particulars, prices and terms on application to

C. R. BUSH,
Hulett, - Wyoming

SHEEP RANCH FOR SALE!

2300 acres with 1600 head of bred ewes to lamb April 25th

JOHN E. BYRNE, Fort Logan, Mont.

Shearing Plant For Sale!

14 Stewart Machine Shearing Plant, with grinder, in perfect condition.

F. I. LONG & CO.,
Great Falls - Montana

SAVE YOUR LAMBS

Don't use your valuable time breaking in your lambing help, **TOTAL PER CENT LAMBING RULES** tell everything; will save five to fifteen per cent of your lambs. Printed on card.

Postpaid per copy
50c

Address **THOMAS BOYLAN,**
ROCK RIVER, WYOMING

ASHTON SHEEP YARDS

ESTABLISHED 1895

Better equipped than ever for the handling of sheep for feeding and grazing. Best of grass and running water in every pasture. YARDS 80 MILES WEST OF CHICAGO on main line C. & N. W. Ry.

KNAPP & SMITH :: Ashton, Illinois

CARBON COUNTY WOOL.

The woolgrowers of Carbon County, Wyoming are well organized and generally do things as a unit. This year the growers of that county have agreed to hold their wool until it is shorn, and then sell it at sealed bid auctions. The first auction will be at Rawlins, May 4th. Most of this wool will have been carefully graded, and it is up to the wool dealer and manufacturer to buy this wool at good prices or else forever hold their peace about better preparation of American wool.

WINTER RESULTS**IN COLORADO**

"Colorado feeders have made a little money during the closing season but few of us realize how close we have been to a bump," said W. A. Miner of Greeley. "The bump is there, however, and sooner or later we will collide with it unless we change our policy. We are up against a combination of adverse influences, not least of which are high-priced feeding lambs and an oppressive feed bill. Sooner or later those of us who stick to the game are going to get hurt. Nothing saved us this season but the European war and foot and mouth disease which repressed finishing operations east of the Missouri River and gave Colorado a practical monopoly on the market.

"Most of our thin lambs were put in last fall on a basis of \$7.00@7.50 per cwt., freight paid to the Missouri River. Corn cost \$1.50 per cwt. Those who bought lambs on the range at \$5.00@5.50 found that they figured over \$7.00 taking freight and shrinkage into consideration, \$7.50 being more like the correct figure. Not many years have passed since we bought thin lambs at 75 cents to \$2.25 per head, corn was 75 cents to \$1.00 per cwt., and every other expense item, including labor was much smaller. Under new conditions the original investment is heavy, in fact feeding, except on a miniature scale, involves the use of a mint of money. Investing \$1,200.00 to \$1,500.00 per carload at the outset is calculated to frighten one not to speak

of walking the floor nights all winter fearful that each moment will be followed by the succeeding one.

"Up to the first of March, Colorado feeders who did not lose money just about managed to break even. That 1½ cent per pound corn charge was what got them. Fortunately weather conditions were favorable, otherwise they would have been in the hole. Lambs cashed at \$8.00 to \$8.50 actually did not pay for their board, but when the common price passed \$9.00 we were on the shady side of Easy Street. Many labored under the impression that they were rolling up wealth while they were taking out tops on short feeds with big gains, but experienced an awakening when the residue was cashed, long feeds and small gains leaving them in the hole. In recent years cost of filling feed lots has been steadily advancing, the feed bill shows a climbing disposition and labor has become exacting demanding shorter hours and more money. The breeder is getting all the profit and the feeder takes the chances.

"Idaho has us at a decided disadvantage both in the matter of feed and securing thin lambs. The Colorado operator is handicapped by his inability to take thin lambs when they are running. Idaho growers must leave their mountain pastures early while Colorado feeders cannot accept stuff earlier than the middle of November. As the big Idaho run is in September, they must see Iowa and the territory east of the Missouri River get the pick of the crop at the best prices. If we could take cuts of Idaho lambs at Laramie in September we would be in a position to make a start under more favorable conditions, but with beet and potato crops to look after, Colorado has no alternative but lay in lambs during the last half of November and pays the penalty. In any case we are not in a position to begin fattening operations early as doing so would necessitate a longer feed. Colorado cannot compete with farm feeders in the cornbelt and must lay back until the bulk of the stuff from that quarter has been cashed. Our only stand-by

YEARLING EWES FOR SALE!

For sale 8000 half-blood Lincoln coming yearling ewes at \$5.50 each, with wool off, April 15th to 25th. The above is an extra choice lot of stuff. Have already been cut 10 to 15 per cent and cannot be beat in the West. Some of our sheep, from such ewes three and four years old, are now turning out 150 per cent of lambs. We believe a half-blood Lincoln ewe is the best mother in the United States.

Will have 7000 February lambs to sell July 1st.

If interested, Write, **COFFIN BROS.**
North Yakima, Washington.
OUR SPECIALTY LINCOLN and ROMNEY BUCKS

RANCHMEN ATTENTION!**DO YOU SEEK A NEW LOCATION?**

INVESTIGATE THE HIGHLANDS OF VA. AND W. VA.

IT IS HERE THAT—

1. The highest priced wool and mutton are grown.
2. The Eastern markets are near which are often one cent higher than Chicago.
3. The altitude is from 2000 to 5000 feet and sheep keep healthy.
4. The land is fertile, blue grass is indigenous and the clovers thrive.
5. The forests are being removed and large tracts can be bought or leased cheap.

One CAR LOAD OF REGISTERED HAMPSHIRE RAMS.
YEARLINGS AND LAMBS FOR SALE.

Write H. W. McLAUGHLIN, Raphine, Va.

Lincolns 1915 Gotswolds

150 purebred LINCOLN and COTSWOLD yearling rams. 150 LINCOLN ram lambs. 150 COTSWOLD ram lambs. Also one car of choice young ewes.

R. S. ROBSON & SON
DENFIELD, ONTARIO, CANADA

Messrs. HICKMAN & SCRUBY, Court Lodge, Egerton, Kent,
England

**Exporters of Pedigree Livestock
of All Descriptions**

Illustrated Catalogues, and References
on Application

We live on the spot, and ship direct to our clients, and the commission we charge for buying amounts to less money than the cost of a trip to this side. Horses, cattle and sheep can be bought cheaper through us than by any other method.

We live in the heart of the Romney country and can supply breeding stock of this favorite breed to the best advantage.

Pure Bred RAMBOUILLET SHEEP

400 yearling Ewes (not registered). Delivery May 1st, '15
400 yearling Rams for 1915 trade.

W. D. CANDLAND

Mt. Pleasant,

Utah

WOOL

MUTTON

RAMBOUILLETS

My RAMBOUILLETS are big and WELL COVERED with dense fleeces. I am breeding Rambouillets suited to give best returns on the range. Write me for prices on REGISTERED STUD RAMS or on RAMS FOR RANGE USE. Will sell in lots from one to a carload.

R. A. JACKSON,
DAYTON, WASHINGTON

Rambouillets

Of the type and quality demanded by the best breeders in America and foreign countries. These leading flocks have rams of our breeding in use.

Rams of size, form, and long heavy fleeces, as good as can be found, now in offer.

A few very choice Standard DE-LAINES.

We are lifetime breeders of the best MERINO sheep required by the markets of the times.

Those who appreciate the value of quality and breeding are cordially invited to inspect our flocks. For any information address either

ROSCOE WOOD
DOUGLAS, WYOMING

or **A. A. WOOD & SON**
SALINE, MICHIGAN

Are your dues paid for 1915?

is cheap hay, that commodity costing around \$4.00 per ton during the past season.

"I believe that the supremacy of Colorado as a lamb feeding state is waning and that Idaho will be the big western finishing state a few years hence. That we can compete with the cornbelt is extremely doubtful. Idaho has advantages not to be ignored. Its surplus of hay is annually growing, it has a broad western outlet and abundance of small grains. Colorado merely has hay and while cost of grain changes with the seasons the price of feeding stock steadily goes up. A disaster is due that will cure many of our people of the habit of filling feed lots for all time to come. However, we will continue feeding until we experience the inevitable bump.

"Dodging high cost feeders is impossible whether one buys on the range or at Denver, which is acquiring prominence as a feeder market. I have tried both plans without getting relief. A shrink of 6 to 10 pounds per head according to the way the railroads handle them is a set back at the outset in the case of buying on the range. When purchasing on the market, the other fellow pays for the shrink which is an advantage if the price is not high enough to offset it. Railroads rough-house us unmercifully. When the solicitor is after the business he is a veritable Promising Johnny, but once we are on the rails, the operating department does not want us around and sticks us on a sidetrack to give the right of way to junk.

"Feeding operations all over the West during the past winter were curtailed by timidity in money circles. The banker appears to have been especially afraid of the sheepman. The result was a lightening up everywhere, Montana feeding little and at the beginning of April visible supply has all the ear marks of a big shortage. After May, there will be merely a few bunches of late stuff, put in at 35@40 pound weights last fall, to go.

"With present prices for wool and fat stock there is naturally considerable enthusiasm over breeding. To

secure a decent bunch of ewes a \$5.00 bid is necessary and most of the stuff not for sale. Ewes are worth more at home than on the market, and present indications are that a \$10.00 basis will soon be reached, if urgent inquiry is worth anything.

"Colorado will fill up next fall, but the assertion that a bump is in store is worth heeding, and when it comes, it will be a bad one."

IDAHO EARLY LAMBS.

As far as I can learn, Idaho has a large crop of early lambs, but the range is very dry, and rain will be needed to keep them growing. The weather all during February was very favorable, very little frost and occasional short storms but not enough to hurt. At time of writing the weather is quite warm and the grass is well started in many sections. Should the weather continue good, all lambs will be on grass about March 15th to 20th. I would estimate 25 per cent more ewes bred early and at least last year's percentage of lambs, perhaps 10 per cent better in all the Snake River Valley from Shoshone to Weiser.

HUGH SPROAT,
Mayfield, Idaho.

LAMBING IN PASTURES.

I have been away for a month, was over to Honolulu, and took in the two fairs in California. As far as I can learn, there has been very little wool sold in Montana. The sales at Dillon are the only ones I hear of, except some wool off of fed stuff. Wm. Rea told me that he sold the fleeces off of 35,000 fed lambs at 26 cents and some wether wool at 24 cents.

We have never had as good a winter for stock since I have been in Montana, as we have had around here this year, and all ewes are in fine shape for lambing and have fine fleeces. I start lambing 1st of April.

I read Mr. Jardine's paper on lambing in pastures in the March Wool Grower with a great deal of interest. I have been developing a system of

pastures for lambing but quite different from that of the government. I have five corrals out on the range a mile or more apart, each has sixty individual boxes for ewes and lambs and I have a coyote proof pasture of from twenty to forty acres in connection with each corral.

I aim to hold the drop band during the day near enough to one of these pastures that the day drop can be put in the pasture and at night we put the drop band in the corral and a night man puts the night drop in the boxes and in the morning this drop is turned out into the pasture; the band being moved to another corral and pasture. In this way the twenty-four-hour drop is left in the pasture until we come back to drop there again.

I have a dry shed on the range that we can go to in case of a bad storm, and a pasture in connection with this that we can turn the drop out in.

Another year I expect to increase these pastures and corrals to seven in number and then I hope to do away with the bunch herders entirely and be able to hold the bunches in the pastures until they have a good start. Each pasture has plenty of brush for shelter, and running water.

There are but few sheep changing hands about here this time of the year, but every one feels that prices are going to be good this fall.

F. D. MIRACLE, Montana.

THE SOUTHERN LAMB CROP.

Kentucky and Tennessee will probably bunch their lamb crop at the market this year. Tennessee is late, Kentucky on time, if not early. Usually Tennessee reaches market 30 days in advance of its northern neighbor, which insures distribution. Tennessee will be considerably short of last year's run, while Kentucky will have about the same number as last year.

In Kentucky lambing began late in January under adverse conditions, snow and ice having covered the ground during December and January, necessitating keeping ewes in close quarters as pasture crops were inac-

cessible. Many farmers had no succulent feed, developing a condition apparently due to nodular disease, plus the evil effects of confinement during feed. Many ewes got down just before lambing, and a day or so later gave birth to a dead lamb, the ewe frequently succumbing itself. Thousands of sheep died in this manner, materially reducing the lamb crop. Growers have yet to learn the value of silage as a source of succulence for ewes, in the opinion of Mark J. Smith, the sheep expert of the Kentucky experiment station.

A few contracts have been made for June delivery of southern lambs on an \$8.00 basis, but neither packers nor commission men are in the humor to make commitments, and growers are disposed to be firm in their ideas of what their property is worth. Bids recently have been on a 7½ cent basis for delivery between June 15 and July 15, but buying on that basis is difficult. Kentucky and Tennessee growers have been bid 30c for their wool but do not like the price.

One reason why dealers are not disposed to contract lambs, is uncertainty



A band of 1000 purebred Lincoln and Ootswold Ewes. Bred from the best stock to be found in United States and Canada. Owned by Austin Bros., Salt Lake City, Utah

Rams for Sale



The Baldwin Type

THIS RAM WAS
TWO YEARS OLD
IN MARCH, 1915,
AND WEIGHED
250 POUNDS

IF YOU WANT
RAMS OF THIS
TYPE WRITE TO
THE

**Baldwin
Sheep Co.**

HAY CREEK, OREGON



One of My Stud Ewes

CALIFORNIA RAMBOUILLETS

I offer for sale 2400 one and two year old pure bred Rambouillet rams. These rams are large and smooth with heavy fleeces of long staple white wool. I also have some of the same class of ewes for sale. My prices are reasonable and correspondence solicited.

Rams Raised in High Dry Country.

CHAS. A. KIMBLE

BREEDER AND IMPORTER

HANFORD, CALIFORNIA



The Kind I Breed

about the Louisville gateway. That point has been badly infected with the foot and mouth disease, and unless that condition is remedied difficulty may be experienced in moving the crop.—J. E. P.

COYOTES AND FENCING.

I have been struck by the picture on the front cover of your February number, a coyote with a dead lamb, and your remarks to the woolgrower under the picture: "He is eating your lamb. He will get ten per cent of them this spring;" finishing with the pointed question: "What are you going to do about it?"

To me, brought up to Australian and New Zealand ways of thinking, the reply that comes first to mind is: "Fence, of course; and then poison and trap."

In Australia the sheep herder disappeared some twenty or more years ago. He is now an unknown thing, a matter of tradition only. It was fencing primarily that displaced him, that made him superfluous. In New Zealand the boundaries at least were fenced, even in the wildest and roughest back country, almost from the first, and the herder can hardly be said ever to have existed there.

My own sheep farming was done in New Zealand, so that I cannot speak with personal knowledge of the Australian wild dogs or dingoes, but I have understood as follows: Poisoning was the best way of dealing with them, but whatever the method, boundary fencing nearly always went with it. The fencing was wanted in any case. It enabled the herders to be dispensed with, so that the sheep might roam at will, thus grazing the ground much more thoroughly, whereby the acreage carried a far greater number of sheep. Also, the fences obviated all rounding up and moving of the sheep at lambing time. And the poison, in conjunction with the fencing was for the dingoes.

Where a man's neighbors were likely to be also warring upon the dogs, he preferred to save expense, and to fence,

not dog-proof, but merely sheep-proof. Where, however, sheepmen border upon men who keep cattle only without any sheep, dog-proof fences have been necessary, because, generally speaking, the cattlemen do not trouble about the dingoes. Also, along the bases of certain pieces of very rough mountain country in which it is impossible to get at the dingoes thoroughly, all fences have been made dog-proof, and such mountain country is used only to a limited extent for sheep.

Hence there are many hundreds of miles of "dog-proof fence" in Australia. For this fencing, five feet six inches has been found to be a sufficient height. Its covering is wirenetting generally of 4" mesh. By "netting" I mean wire woven in hexagon or honeycomb pattern. But there are many makes of rectangular meshed woven wire fencing on the market in this country which are probably quite as efficient. Many of your readers can doubtless say what sort of fence is needed in this country to turn coyotes and wolves.

I would ask you, therefore, whether more use cannot be made of fencing in this country than has been the case so far? In cases where men are grazing upon forest reserves and other government lands, I presume fencing is out of the question, though I do not know whether the Federal or State governments favor fencing schemes, or would do so if the cases were represented to them. Might they not grant leases for a term of years long enough to pay for the cost of fencing, or be induced to offer to accept fencing as payment for grazing as an alternative to cash?

In cases in which it is not practical to fence the whole of the range over which the sheep run, would it not often be possible to fence a comparatively small area coyote-proof, for use just at lambing time? Here I speak of the States further south where the snow does not lie, and where I understand the lambing is consequently out of doors. Does the loss through coyotes take place almost entirely at actual lambing time, or are strong lambs

week or mothers, If the la fairly st I shoul the state chief she Texas fen that state whole pa some sta or almost move on Texas?

Special Australia Under the fence can he, the n work. T between the man noti ginator c recover h his neigh tain a de sidered a nition pr tries to i reasonable

In you give a p I underst tually cli will do s the nettin the top o English Australia ing an in sheepmen foxes, as many lar Quite a

beasts, t many. S mentione dary fenc ing on in "The mo your can hardly c sufficient of new and in N greater i

week or two old, running with their mothers, still subject to heavy toll? If the latter, after what age are they fairly safe?

I should much like information as to the state laws regarding fencing in the chief sheep states. I am told that in Texas fencing is quite general; that in that state each rancher ring-fences his whole pasture. If this is so, is there some state law making it compulsory or almost so, or is this a voluntary move on the part of the ranchers in Texas?

Special fencing laws exist in all the Australian states and in New Zealand. Under them, any man when ready to fence can give his neighbor notice that he, the neighbor, must join in the work. They then usually agree between them, each to do half; but if the man notified will not act, then the originator can put up the whole fence and recover half the cost summarily from his neighbor. These laws always contain a definition of what shall be considered a "sufficient" fence, which definition protects a man if his neighbor tries to insist upon a fence that is unreasonably expensive.

In your issue above referred to, you give a picture of Australian dingoes. I understand that these dogs never actually climb up a fence, but that a fox will do so. The fox will scramble up the netting and perch for a moment on the top of a post and then jump down. English foxes were introduced into Australia for sport, but are now proving an increasing source of loss to the sheepmen. In this country do the foxes, as well as the coyotes, destroy many lambs?

Quite apart from the question of wild beasts, the advantages of fencing are many. Some of them are incidentally mentioned above. Following the boundary fencing, subdividing is always going on in Australia and New Zealand. "The more you subdivide, the greater your carrying capacity" is a maxim hardly disputed. In Australia, wire sufficient for no less than 60,000 miles of new fencing is imported annually, and in New Zealand the amount is still greater in proportion to the size of the

country. This would not be so if fencing were not profitable.

I feel sure that many of your correspondents can give information on the points I have raised, and that a discussion of the whole matter will be beneficial generally.

G. HUTCHINSON,
Chicago, Ill.

PREGNANT EWES MARKETING.

Although the west is engaged in conserving breeding stock there is no disposition among farmers in the Mississippi Valley at present either to establish ewe flocks or save females now on the farm.

All through March pregnant ewes were numerous in evidence at the market, many of them having reached an advanced stage that rendered shipping reprehensible. They were subjected to severe discounts, but were regarded as well sold at any price.

Country buyers in the cornbelt agree that the spring lamb crop will be small. Many of them have quit handling sheep owing to market eccentricity, and it is not improbable that wide price swings have been in no small measure responsible for the manner in which the farmer is avoiding wool and mutton.

The circulation of this paper is gradually increasing.

The McIntyre Building

Salt Lake City, Utah

Is Headquarters for the
NATIONAL and UTAH WOOL
GROWERS' ASSOCIATIONS

The Most Modern Fire-proof Building in the City

|| OFFICES FOR RENT ||

WHEN YOU ARE READY FOR THE

PRINTING

of that Catalogue, Prospectus, Booklet, Folder or anything that goes to upbuild your business, it would be well to confer with a printing house that can give you a product which will accomplish what you intended it to. You will find no printers better equipped to do the work and do it in the way it should be done than the

CENTURY PRINTING COMPANY

We print the Wool Grower and many other high-class publications.

Salt Lake's Printers

W. G. ROMNEY. J. Q. RYAN. CENTURY BLDG., 231-3-5 EDISON ST., SALT LAKE

BERKHOEL MUSIC CO.

Any piano will "sound."
The HARDMAN PIANO sings.
That is why Caruso uses it—
That is why we choose it.
No jobber between us and the factory.
Write for catalogue.

BERKHOEL MUSIC CO., 68 EXCHANGE PLACE
SALT LAKE CITY

BARLEY

The best grain feed for sheep—
better than corn and the price is less

—WRITE US—

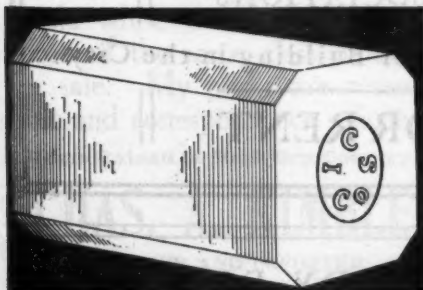
C. A. Smurthwaite Grain & Milling Co.
201 Deoly Block - Salt Lake City, Utah

**"THE SALT OF THE EARTH
—THAT SALTY SALT"**

A MOVING MOUNTAIN OF SALT—moving all the time
on board cars at Redmond.

Salt in large lumps, loose in car, or
ground fine in sacks. THE STRONGEST AND
BEST STOCK FEEDING AND REFRIGERATING SALT
IN THE WORLD. WRITE FOR PRICES.

GUNNISON VALLEY SALT CO.
REDMOND, UTAH



The most economical and perfect
stock salt in the world. The proof
is in the use. Manufactured by **INLAND
CRYSTAL SALT CO.,** Producers of Royal
Crystal Salt, Salt Lake City, Utah.

**SULPHURIZED
ROCK SALT**

Every western woolgrower can
well afford to pay this Association
\$5.00 per year.

DEVELOPING WATER.

In the last issue of the National Wool Grower, we presented a story telling what the Forest Service is doing to develop watering places on the National Forests. This is certainly most excellent work and should receive the hearty commendation of all sheepmen. Every person who has had much to do with the public range appreciates that but little has ever been done to protect or improve it. Of course, the public domain belongs to no one and no one takes any interest in preserving or improving it. Vast areas have gone only partially used or greatly overused just because there was no controlling hand to regulate their use. It is too late now to make amends for carelessness in the past, but such range as now remains should be developed to its highest capacity, and then used so as to preserve it in that condition. Certainly it is possible to develop watering places in many spots now arid and an investigation of this subject by the Federal Government should result in an increased use of the remaining public lands.

OMAHA'S RUN IS HEAVY.

Omaha has had the big sheep run this season, breaking all records in March. That month delivered 264,000 there against 252,000 a year ago, while Chicago had only 259,000 or 201,000 less than in 1914. To what extent Chicago suffered owing to the eastern embargo can only be conjectured, but lack of a shipping outlet and relatively high prices in the West undoubtedly stopped a lot of stuff at Omaha that would otherwise have come through and light feeding in Iowa was also a supply curtailment factor.

J. E. P.

LAMBS IN THE CORN FIELD.

After three successful years of "lambling down corn" on his thousand acre farm near Kansas City, A. J. Knollin is preparing for a repetition of this method, feeding on a much larger scale next fall.

A rather familiar phrase in the corn-belt is that of **hogging down corn**; the lambs are handled in somewhat the same manner. That this practice is a moneymaker under the right conditions is proved by the results obtained at Loma Vista. Over nine hundred lambs were marketed after being on feed sixty days, at an average gain of 16 pounds; the balance, five hundred, were held for 90 days and showed the same gain. In spite of a very poor corn crop, resulting from the drouth, these lambs were fed on seventy acres of corn; the corn averaging about thirty bushels to the acre. The only additional feed they received was the pasture from three hundred acres of grass. These lambs were bought at \$6.35, weighing fifty-six pounds, and sold as follows:

Lot 1, 900 head, average 72, \$9.10 per cwt.

Lot 2, 500 head, average 72, \$8.25 per cwt.

Loma Vista is located ten miles northwest of the Kansas City stock yards, thus having the advantage of quick communication with the market. In fact a telephone message in the afternoon is all that is necessary to get the sheep on the market the following morning. This minimizes the danger of striking a "break." Mr. Knollin's farm possesses to a remarkable degree the qualifications which make the practice of "lambling down corn" practicable. It has (a) excellent corn land and corn weather; (b) bluegrass and clover pasture adjoining the corn fields; (c) a constant supply of pure

2,000,000 LBS. BARLEY ON HAND
—PHONE, WRITE OR WIRE FOR PRICES—

FARMERS GRAIN & MILLING CO., SALT LAKE CITY

water, easily available; (d) a favorable climate.

It would be folly to attempt to feed lambs in the fields, in localities which are subject to bad storms during the fall and early winter months. At Loma Vista there is seldom any bad weather before Christmas, and the bluegrass sometimes affords pasture most of the winter. Everlasting water is supplied by a creek, fed by springs. It never freezes entirely. This creek runs central to the cornfields and the pasture. Thus the three most necessary requisites, viz. corn, grass, and water, are close together.

But why feed in this manner? What are the savings, the advantages over close feeding? Of course, first and foremost is the question of LABOR. Those fourteen hundred lambs were handled entirely by one man and a dog, except for an hour or two each during the first ten days, when another man aided in driving them to water and pasture. He would not have had to devote his entire time to this work, except for the danger from dogs and coyotes. (These rascals have invaded even Loma Vista, situated on a trolley line, and scarcely out of the city limits. Four coyotes and a gray wolf were killed there last winter.) Thus the labor of feeding is reduced to a minimum, and all sheds, troughs, and racks are done away with.

But the biggest saving in labor is in the harvesting of the corn. Any farmer knows the expense of cutting and husking. This is all saved. After the sheep have been through the field not a kernel of corn remains; there is nothing but bare stalks; even the leaves are stripped off. It is customary at Loma Vista to run the stalk cutter over the fields a few rows at a time, so that the lambs will get the ears which are too high for them to reach. After the stalks are cut, the ground is plowed as quickly as possible in order to conserve the manure. There never was a manure spreader that could beat a band of sheep for even fertilization.

The method of handling is about as follows:

During the first few days it is nec-

LIVE STOCK GROWERS AND FEEDERS

We are at all times in the market for Fat Cattle, Sheep and Hogs.
CALL US ON LONG DISTANCE TELEPHONE, OR WIRE US FOR PRICES.

UTAH PACKING & PROVISION CO.

TELEPHONES: Wasatch 1826-1827
Night Telephone, Hyland 1554W

SALT LAKE CITY, UTAH

National Wool Grower advertisers are reliable.



We use our best endeavors to save the Sheepmen all the money we can on anything purchased from us.

Let us send you our new 150 page catalog, it is Free. Send us your guns for repairs. We have the most complete repair shops and best mechanics in the United States.

BROWNING BROS. CO., Ogden, Utah

**The biggest
"little car"
in the world**



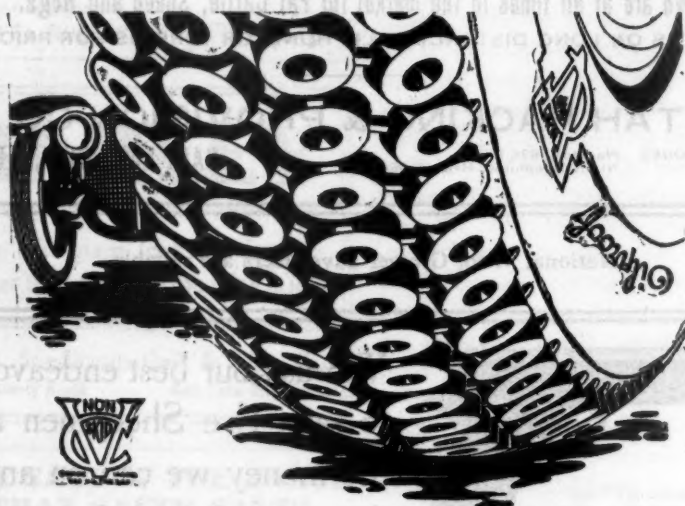
"OLDS" 42

Kid Brother to the Big Oldsmobile "6" and just as good a car in every respect. Eats up country and likes 'em. —you'll like this new Olds 42 from the moment you see it. Its 112-inch wheel base, deep upholstery, ample leg room, wide doors and wide seats make it comfortable for five large people. Inspecting it more closely, you will find Circassian walnut woodwork throughout; every instrument set flush in the dash; cast aluminum foot and running boards; concealed tool box with complete equipment, jitty curtains; one-man type cape top; solid hickory wheels, natural finish—and as many other equally desirable attributes. Call and see this car in our salesroom, and let us give you an Oldsmobile ride. Tel. Was. 3357.

Oldsmobile

RANDALL-DODD AUTO CO., 53 WEST 4th SO., SALT LAKE CITY

We Are Western Distributors For



PENNSYLVANIA Oilproof VACUUM CUP TIRES

Tread bound to carcass with pure paragon, making tread separation practically impossible. These tires give greatest mileage.

SALT LAKE HARDWARE COMPANY
SALT LAKE CITY, UTAH

**Ford, Studebaker and Overland Seat
Covers \$5.00 complete set.**

Regular \$7.00 Tool Boxes for \$2.00 while they last.

Oils, Gasoline, and Accessories.

All Makes of Tires.

Puncture Repairs 25c.

**UNITED VULCANIZING CO., 325 SO. STATE ST.
SALT LAKE CITY**

essary to handle them rather carefully to prevent scouring, but there is little danger of their getting too much corn. In fact, it is sometimes difficult to hold them in the fields, as they have not yet learned to eat the grain. They begin by stripping the leaves a little. A few hours a day is all that they should be allowed in the corn for about a week or ten days, say from 10 in the morning to 3 in the afternoon.. They may be taken to water about three, and then returned to the pasture. It does not take them long to learn what they are put in the corn for, and then the difficulty is to get them out. They soon begin shelling the grain, and it is surprising how high they can reach, and how quickly they learn to break down the high stalks, where the ears are out of reach. Towards the end of the feeding period they were allowed free access to the corn and the grass, and it was found that they went into the corn early in the morning, rested in the field during the middle of the day, went down to water in the afternoon, and then returned to the pasture about four o'clock.

Next year, with a favorable corn crop, Mr. Knollin hopes to feed at least twice as many. There is no reason why they could not be handled on the same acreage, (provided there is plenty of corn) if a bit of clover or alfalfa hay is provided in case pastures give out.

J. C. K.

PROFITABLE RABBIT INDUSTRY IN AUSTRALIA

"The rabbit has made great headway in the Australian district around Nimitybelle, and trapping has become a profitable industry," says a Sydney paper. "One buyer alone sent away over a ton of skins each week all through last season. It has been decided to start freezing works at the place. The exportation of rabbit skins from Australia now exceeds in value over \$3,000,000 annually."

Woolgrowers could get us 1,000 subscribers per month if they cared to.

HOW TO HANDLE TAIL-END LAMBS

The idea of efficiency has been applied to lamb feeding by Mr. A. M. Hilton, of Hilton Bros., Durango, Colorado.

Mr. Hilton, instead of shipping all of his range lambs last season, held the cut-backs for feeding at the home ranch, with gratifying results.

His feed consisted of oats and cow-peas, drilled together early in the spring at the rate of $2\frac{1}{2}$ bushels to the acre, in the proportion of a little over half peas. The field was not irrigated. After the mixture was cut and threshed, quite a quantity of the pea vines and pods remained on the ground. Rather than see this wasted, Mr. Hilton turned 500 of the best of the cut-backs into the field. They ran on this field (forty acres) for thirty days, and at the end of that time were marketed, weighing 71 pounds, at \$8.85 per cwt. They cleaned up all the peas and vines, which ordinarily would not have been used, and received no other ration.

Then five hundred more were put on grain. They received a maximum of one pound per head a day, and all the alfalfa they would eat. The grain consisted solely of the peas and oats. After sixty days they weighed 72 pounds on the Kansas City market, and brought \$8.30.

The last bunch, the culls of the entire outfit, were on feed altogether for four months, receiving no grain the first thirty days, then the mixture of peas and oats the next month, then a little barley, and finally some corn, as the peas ran out. On March 8th, they were marketed at Kansas City. They weighed 70 pounds, sold for \$9.50, and netted the feeder \$6.04 a head.

Thus we see that these lambs, with the exception of a few in the last bunch, received only the feed grown on the place, and brought prices which left a good margin of profit over the cost of the feed. If they had been sold with the fat lambs in the fall, they would not have commanded over \$7.00 even as good feeders, and might have

been caught in the packer's dragnet for less.

Mr. Hilton's conclusions are that feeding his own cut-backs is a mighty profitable idea, and that many more range-men, situated in the same way, could well follow his lead.

J. C. K.

GOT 59 COYOTES.

I have been trapping for about two months near Thomsons, Utah, and caught 59 coyotes and 4 cats. We

trappers have much trouble getting the bounty as sheepmen do not take any trouble to vouch for us. I collected bounty on only 15 coyotes.

The hides that I shipped averaged me \$1.60 and I sold nine of the best ones for rugs at \$5.00 each.

The best way to get coyotes is to get the den when the young are in it. Dens are not hard to find.

J. T. HOUGHAN, Utah.

Who will work for you when the National is gone?

Inter-Mountain Garage & Automobile Co.

"Home of the Tourist"

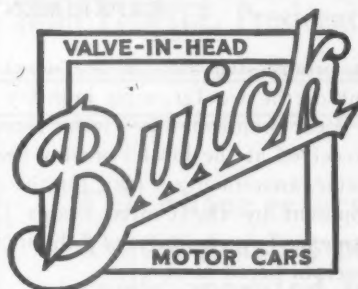
179 TO 183 EAST 2nd SOUTH

New Carter 1915 MODEL fully equipped \$1350.00

We have the largest floor space for storage in the Inter-Mountain country. Special rates made for regular customers. All kinds of repairing done and work guaranteed.

PHONE WASATCH 5456

E. R. POYNTER, - Proprietor



*"When Better Automobiles
are Built, BUICK will Build
Them"*

**1915 Cars now
ready for delivery**

**Five Models—three Touring, two Roadsters. Prices—\$1000
to \$1800. Power, Speed, Endurance and Economy.**

Randall-Dodd Auto Co., Ltd.

Distributors UTAH, IDAHO, WYOMING

Salt Lake City, Utah

Boise, Idaho

Courtesy, Helpfulness,
Strength

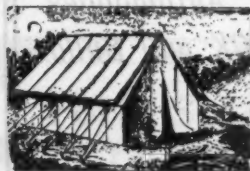
National Copper Bank
SALT LAKE CITY



Salt Lake City, Utah



SMITH & ADAMS



MANUFACTURERS

TENTS

WAGON COVERS
PACK OUTFITS,
HORSE BLANKETS.

Anything made of Canvas
Our new home: 226 Edison Street, Salt Lake City, Utah
Estimates promptly given.

AROUND CONVERSE
COUNTY, WYOMING

Sheep conditions in Converse county, Wyoming are good. There has been considerable snow during the winter, ground bare only in spots since December 9th, but as people were prepared to take care of them, sheep are

in good shape and there are no losses to date (March 12). The wool clip will be good and should be clean as there has been but little wind during the winter.

There are very few sheep for sale, no new men going into the business as the range is being curtailed by the settlement of the country. Wool clip will be about the same as last year, but not more than one-half what it has been in the past.

The general outlook for the industry in this region is good as far as the care of the sheep are concerned as there will be little if any loss on account of the reduction in the number of sheep and the better care given them, but the number will be very materially reduced from what they are at present.

There has been no wool sold here as yet, considerable inquiry from buyers, but as the prices are uncertain the growers are not willing to sell at present, so I do not think there will be much if any wool sold until after shearing.

I want to compliment you on the success of the "National Wool Grower" as you are certainly making a great paper of it and I take every opportunity possible to get you subscribers.

Douglas, Wyo.

A Reader.

SHEEP BREEDING EXPERIMENTS

A progressive step in the development of the woolgrowing industry of the West is indicated in a letter recently received at the local Forestry headquarters, announcing a plan for the development by the United States Department of Agriculture, of a distinctly American breed of sheep.

This work was begun on a small scale some time ago in Wyoming, but it is now the desire of the Department to engage in the experiment on a much larger scale. With the end in view of finding a suitable location, Mr. L. L. Heller, of the Bureau of Animal Husbandry will visit the Ogden Forestry headquarters in the near future to ascertain whether or not favorable

ranges are available in Utah, Nevada or Southern Idaho, upon which the work may be conducted.

According to the Foresters, ideal conditions may be found in practically any part of the Fourth Forestry District and an effort will be made to have the experiment conducted in this locality. An especially favorable situation is believed to exist on the Teton range of mountains in southeastern Idaho, where it has been asserted by men of authority, the best grade of wool in the West is produced. These ranges are in the Palisade and Targhee National Forests.

The experiment proposed is along the same general lines as those in England, Scotland and France, where most all of the different distinctive types of sheep known to American woolgrowers have been developed. The work of our Department of Agriculture if carried out in the West as planned, will no doubt result in the production of a combined wool and mutton producing animal especially adapted to the needs and requirements of the woolgrowing industry, as conducted in the western range states.

IN WESTERN IDAHO.

Sheep in this part of the country have wintered fine. We have two bands, one of mixed lambs and ewes, the other all ewes. Will start lambing the first of April.

Have had six weeks of very cold weather for this country from about the last week in November until the first week in January. We have had very little snow. Spring weather has now set in and grass is growing fine. All look for a fine wool clip and fancy prices.

We winter our sheep in Grandview valley on Snake River, Idaho.

There is some rabies here among coyotes and dogs, but so far have not heard of any trouble among the sheep.

All love to read the Wool Grower. With success to the Wool Grower, we remain,

HAMMOND & GAINES.
Mountain Home, Idaho

MARCH LIVE MUTTON MARKET

Sheep and lamb feeders made a little money in March. It was a period of high prices from start to finish. Woolled lambs never dropped below \$9.75 and on 23 days of the month a \$10.00 top was registered, the \$10.00 limit being paid three times. As averages are figured that of woolled lambs on the Chicago market for the month was \$9.60, a new record, being 20 cents per cwt. above the previous high point in March, 1910, 85 cents higher than the February average and \$1.95 higher than March, 1914.

Nor did lambs have a monopoly of the pyrotechnical display. Sheep averaged \$7.50, which includes ewes. Yearlings were also in the spotlight, Colorado-Mexican yearling wethers reaching \$9.75, the highest by 25 cents per cwt. ever paid for that class. The average cost of ewes and wethers at \$7.50 was 10 cents below the records of March and April, 1910, but 80 cents above February, 1915, and \$1.60 higher than March, 1914.

Toward the end of the month despite persistent opposition by packers values reached the highest altitude and with the exception of shorn lambs were 35 @50 cents above the close of February, which was the high point of the previous month. Owing to the fact that packers wanted wool, shorn stock met discrimination and closed with only a 10@25 cents advance over February's close.

A stellar array of high spots developed during the month. Colorado and western lambs in the fleece scored at \$10.10; native lambs, \$9.80; yearlings, \$9.25; wethers, \$8.40; western ewes, \$7.95; native ewes, \$8.00; and bucks, \$7.00. In the shorn classes Colorado lambs reached \$8.40, western and native lambs, \$8.50; yearlings, \$7.85; wethers, \$7.10; western ewes, \$6.65; natives ewes, \$6.75; and buck, \$5.50.

In some respects the market bore out prediction and when the handicap of cheap beef and pork is considered it was a phenomenal trade, although warranted only by scarcity. Packers owing to an eastern embargo on ship-

Garden, Field and Flower Seeds. Poultry Supplies.
BIG CATALOG FREE IF YOU MENTION THIS PAPER
VOGELER SEED CO., SALT LAKE CITY, UTAH

CITY COAL COMPANY

PHONE: WABATCH 420

KLEAN KOLE

J. W. OTTENSTEIN, Mgr.

42 WEST SECOND SOUTH

SALT LAKE CITY, UTAH

Farmers and Stockgrowers Bank**SALT LAKE CITY, UTAH****Capital \$300,000.00****Surplus and Profits \$20,000.00****National City Bank**

CAPITAL AND SURPLUS - \$300,000

SALT LAKE CITY, UTAH**LIVE STOCK GROWERS' ATTENTION!**

The Utah Packing & Provision Co., is in the market all the time for cattle, sheep and hogs. Call us up by long distance, or wire for prices.

JOHN PINGREE, President Phone 3831 North Salt Lake

This Space reserved for Montpelier Stock Yards, grazing pastures, and other stock yards operated by Leary & Warren Co., lessees, including the Union Stock Yard of Salt Lake City.

When Writing to Advertisers Mention The National Wool Grower

HOTEL UTAH

SALT LAKE CITY

ROOMS WITHOUT BATH
\$1.50 AND \$2.00 PER DAY
WITH BATH \$2.50 AND UP

"The very best of everything at sensible prices"



SALT LAKE CITY

The Wilson EUROPEAN HOTEL

Within two blocks of all
Mormon interests and in
the heart of the city.

B. B. RAMEY Free Auto Bus
150 rooms \$1.00 to \$1.50 per day.
75 rooms with bath \$1.50 to \$2.00
per day.

Mention the National Wool Grower

ments from Chicago were unable to repress the rising tendency of the market, otherwise the appreciation would probably have been 25@50 cents per cwt. more. Most of the time, all eastern outlets were closed to live shipments and while killers down that way went to St. Louis and Missouri River markets to satisfy their needs, many took the shortest cut out of the difficulty and purchased from the big packers. Had Chicago possessed an eastern outlet, competition would have been keen at all times and packers would not have occupied a position



that practically enabled them to dictate terms.

Eastern markets were on starvation rations all through the month, Buffalo reporting an \$11.35 lamb top. Practically nothing went east from Chicago on the hopp all month, the 22,000 head sent out going to Detroit, Milwaukee and other nearby points. During the same month last year shipments were 125,000.

Supply statistics tell the story of scarcity eloquently. Chicago received less than 260,000 during the month, a decrease of over 200,000 compared with March, 1915, making the smallest March supply since 1910, when the \$10.60 record was made. The quarter year run at Chicago is approximately 625,000 less than in 1914, and receipts at the six western markets on the same basis of comparison show a loss of 550,000. Much western stuff that under normal conditions would have been consigned to Chicago stopped at Missouri River points owing to the eastern embargo.

Colorado lambs comprised the bulk of the month's supply and excessive weight was the burden of killers' complaint. Big lambs were subjected to stiff discounts, some selling as low as \$9.00@9.15, although most of the 80 @94 pound goods cashed at \$9.35@9.85 while \$9.75@10.00 took most of the good Mexicans, \$10.00 being a common price for these market favorites. With the exception of a few odd loads the entire Colorado run wore fleeces. Colorado shorn lambs sold at \$8.00@8.40.

Fed western lambs in the fleece sold mainly at \$9.25@9.90 with a sprinkling at \$10.00@10.10. Most of them cost \$6.50@7.25 when laid in last fall yielding finishers a substantial margin of profit. Very few native lambs were available at any time and as they lack quality they sold at stiff discounts from western stock. The limit on woolled natives was \$9.80 with the bulk at \$9.00@9.75.

Little shorn stock materialized and the spread between woolled and clipped grades was about the widest in market history. Packers wanted wool and bid for it discouraging shearing. Most of

THE NEWHOUSE HOTEL

opened its doors to the public on March 27, 1915

THE SHEEPMEN ARE CORDIALLY INVITED

Rates Reasonable

Special Entertainment Each Evening in Louis XVI Room

400 Rooms. Every room with a bath.

F. W. PAGET, Mgr.

The Kenyon Hotel and Maxims Cafe

Invites the Sheepmen and their friends at special rates.

DAVID MATTSOON,
Proprietor

CULLEN HOTEL

SALT LAKE CITY, UTAH

FRED J. LEONARD, Mgr.

Headquarters for Sheepmen

More Sheep bought and sold in the Cullen
Hotel than in any hotel in the United States.

Rates \$1.00 and up.

the shorn lambs sold at \$7.85@8.25 with light weights up to \$8.50.

Most of the time sheep receipts were insufficient to make a market, lambs comprising about 90 per cent of the total. Few sheep went on feed last fall, consequently they could not come back. Prime 132 pound western wethers, fed in Wisconsin, carrying a few big wethers, made \$8.40 and many sheep taken out last fall at a cost of around \$5.00 were returned, shorn to sell at \$6.90@7.00. One load of shorn wethers reached \$7.10. For prime native ewes in the fleece \$7.75@8.00 was paid all month. Heavy ewes were as scarce as big sheep and sold at a premium. The best fed western ewes cashed at \$7.96; shorn native ewes touched \$6.75; and shorn western ewes \$6.65. Yearling wooled wethers were very scarce and earned \$8.50@8.85, Colorado-Mexicans of lamb weights selling up to \$9.00@9.25. Shorn yearlings passed \$7.85, and \$7.00@7.75 took most of them.

The first spring lambs of the season, 50 pound Iowa natives sold at \$15.00 against \$14.00 in 1914. Only a few small lots were yarded and \$12.50 bought good ones toward the end of the month.

MAY NEED ALL AUSTRALIAN WOOL

In commenting on the exportation of Merino wool from London and Australia to the United States, the editor of the London Wool Record, under date of March 4, makes the following suggestive statement.

"We have every reason for saying that the (London) Board of Trade is becoming convinced that Great Britain and her allies will be able to consume all the prospective supplies of Merinos, and in our opinion prices have only to advance a little more, and the demand become more accentuated on the part of American and Continental neutrals, to cause a complete embargo to be imposed. We say that this is one reason for the urgent buying done by America in London during the past fortnight, followed up by similar operations in Australia."

COMPARISON OF WOOL PRICES

The London Wool Record gives the following prices for unwashed greasy wools just as they come from the sheep.

	March, 1915 Cents	March, 1914 Cents
Lincoln	26	19
Romney	28½	22
Southdown	30	24
Shropshire	32½	23
Hampshire	30	22½

Attention Wool Growers Salter Bros. & Co. Wool Brokers

216 SUMMER STREET
BOSTON, MASSACHUSETTS

Solicit wool shipments for direct sale to the mills. Always sold subject to shipper's consent. Liberal advances. Best of references.

SULPHUR ALL GRADES—ANY QUANTITY FROM A BAG TO A CARLOAD Z. C. M. I. Drug Store

WOOL BAGS

We handle more Wool Bags than any dealer in the inter-mountain region.

PAPER TWINE

"Reliance" Paper Fleece Twine has the greatest possible tensile and tying strength.



SHEEP SHEARS

B. B. A. and 71 or
Trades Union Shears

SOFT ARKANSAS and
LILY WHITE OIL
STONES

SALT LAKE CITY,
UTAH

AYRES, BRIDGES & CO. Wool Merchants

200 SUMMER STREET BOSTON, MASS.

Western Agents—GODDING & CHADWICK CO.,

310 Dooly Block, Salt Lake City, Utah

P. O. Box No. 635, Albuquerque, New Mexico

Before Disposing of Your
Wool, Phone or Write—

COFFIN & GILMORE Wool Merchants

PHILADELPHIA, : PA.

Large Handlers of Western Wools

Local Office, D. F. Walker Block,
Salt Lake City, Utah

Phone, Wasatch 4570
J. A. KEARNS, Agent

HAVE POOLED THEIR WOOL.

Heber, Utah, March 29.—At a meeting of the woolgrowers of this county a committee consisting of J. W. Clyde, Isaac Jacob and G. Frank Ryan was appointed to look after the sale of the wool clip of the owners. The parties interested are those who shear their flocks at the Lofgren shearing pens, and the clip which is of exceptional good quality runs around 200,000 pounds. Arrangements were also perfected at the meeting looking to the better care of the wool this season in its preparation for market.

The woolgrowers feel that wool prices at shearing time will be even stronger than at present, even though the committee have already received some tempting offers on the big clip they represent. It was stated at the meeting that a prominent wool buyer of Salt Lake City had said recently that his house would buy this year only half the wool they did last year and when asked why, replied that it would take twice the money this year to buy what they bought last year. A report was made showing that a careful analysis of the foreign market conditions together with the fact that the banks are behind the woolgrowers, are facts sufficient to justify the woolgrowers in their decision to hold for better prices. The committee was therefore instructed to secure better prices with the alternative of shipping to the National Warehouse or consignment to Boston Bankers, a proposition having reached them from the latter sources.

WOOL IMPORTS.

The importation of combing and clothing into the United States for January, 1914, was 16,310,687 pounds while for the same month this year the imports were but 7,462,212 pounds. This shows that wool imports for January have shrunk over 50 per cent and indicates that the embargo is having its influence.

Your dues were due January first. Are they paid?

A WOOL DEALER'S VIEWS.

In spite of a slight recession in prices (more on some grades than on others) from the extremely high level of a few weeks ago the real statistical position of wool remains unchanged. There is not one good reason why wool should decline, and there are a hundred and one reasons why it should go higher. After the feverish activity of the last few months a reaction was the most natural thing in the world. We had one such reaction this last summer, when prices dropped off considerably, only to be followed by one of the most phenomenal booms in the history of the trade.

The annual spring bear movement on the part of certain large houses in the trade is now in full swing. With no stock on hand, and unable to buy to advantage either in the West or anywhere else, what is more natural than that they should set out systematically to hammer the market. New York commission houses are informed that large supplies of foreign wool are on the way and that the market is sure to be easier. Immediately a few orders are canceled. Next the "Cold Feet Brigade" gets busy. Certain dealers whose capital is small become anxious to sell and push their stock overzealously at a time when no one wants to buy. Take it all in all, the whole thing is working out very nicely; but no one in the trade believes for a minute that such a thing as a radical decline is possible, in view of the strong position of all the primary markets. Prices might possibly ease off a cent or two more while this movement is under way, but a real drop in wool is simply out of the question.

London is firm, Australia is firm, the West is firm. South American and Chinese markets are high. Pulled wools, which have shown the most weakness, absolutely cannot be replaced, with skins selling at \$2.50 to \$2.55, which is the highest in years. The re-appearance of the hoof-and-mouth disease will cut down the amount of wool pulled in this country during March to less than 2,000,000 pounds, and after

April there will be nothing of any consequence pulled until September, except a few shearlings. It is doubtful if there are over 2,500,000 pounds of territory wool in Boston, and there will be no arrivals from the West of any great consequence for two months. It is doubtful if over 65,000 to 70,000 bales all told have been purchased in Australia, and probably 90 per cent of this has been sold to arrive. How much of it will ever get here is entirely problematical. Purchases in South America amount to possibly 60,000 bales, 80 per cent of which has also been sold to arrive. Shipments from London have ceased, and it is doubtful if we get much more wool from that source. The consumption of raw wool in the United States, including that consumed by carpet mills, will average from year to year approximately 50,000,000 pounds a month. Where is this wool coming from?

It has been computed that there are not enough sheep in the world to clothe for a year the combined armies in the field in Europe at the present rate of consumption, where every man has a new uniform and complete equipment, underwear, blanket, etc., every four or five weeks. On this basis where is the wool coming from for the civilian trade? The number of men in the field is only one-tenth of the population of the United States alone. Tens of thousands of sheep are being slaughtered for mutton for the allied forces. There is no time to clip or pull this wool. It is a dead loss and cannot be replaced.

From time to time we have seen statistics showing a large proportion of looms idle in New England. As late as March 1 we have seen such a report. This is offset somewhat by the fact that a larger amount of preparatory machinery is busy. Then, too, it should be remembered that all along business has been "spotty." It has not been an uncommon thing to see two mills, standing side by side in the same village, one of them practically idle, with the other running day and night on war orders. You can quote figures all day, but the fact re-

mains t
being, c
Boston
wool if
tion's

Take
William
America
that 70
ery of
present.
past few
manufa
and Lo
State o
a rush
as the
one or
fore. T
the Atl
quit, th
mills, t
mills an
them o
corner

The
the que
The w
about 8
tremend
wholesa
ton. T
and So
probabl
althoug
sarily m
this sh
omenal
world
conditi
for wo

If th
of the
a serio
ty of 1
Merino
cept to
for arri
that if
be sup
mills n

mains that wool has been, and still is being, consumed very rapidly. The Boston market is bare. Where is the wool if it has not gone into consumption?

Take it all in all, the mills are busy. William M. Wood, president of the American Woolen Company, estimates that 70 per cent of the woolen machinery of New England is running at present. This is much better than the past few months have averaged. Big manufacturing centers like Lawrence and Lowell are very busy. The little State of Rhode Island has seen such a rush of business the past two weeks as the textile industry there has, with one or two exceptions, never seen before. The National and Providence, the Atlantic the Riverside, the Namquit, the Mapleville mill, the Fletcher mills, the Lorraine and the Wakefield mills are all running full and some of them overtime. This is just one small corner of the textile industry.

The whole thing simmers down to the question of supply and demand. The wool clip of Europe (ordinarily about 800,000,000 pounds) will show a tremendous shortage because of the wholesale slaughter of sheep for mutton. There is a shortage in Australia and South America. Our own clip will probably fall short 25,000,000 pounds, although, of course, this last is necessarily mere conjecture. As against this shortage we have the most phenomenal production of cloth that the world has ever seen. In the face of conditions like these how is it possible for wool to decline?

A. F. BAKER, Boston.

MAY NEED ALL AUSTRALIAN WOOL

If the war is prolonged the demands of the Allies will be such as to call for a serious consideration of the necessity of limiting the export of shafty Merinos as well as of crossbreds (except to such neutrals as require wools for army contracts). It is assumed that if the Allies requirements are to be supplied, the assistance of U. S. A. mills may be necessary.

Crimmins & Pierce

WOOL and MOHAIR

281 Summer Street

BOSTON

Western Representatives
C. C. BROWN, Salt Lake City, Utah
AND
J. W. SUMMERHAYS & SONS CO.,
Salt Lake City, Utah

Branch Offices
PORTLAND, ORE.
CHICAGO, ILL.
SAN FRANCISCO, CAL.

JOHNSON, SHARP & CO.

SUCCEEDING LUCE & MANNING

Wool Merchants

Special Attention Given Consignments

232 SUMMER STREET

BOSTON

LESLEY A. JOHNSON

GEO. H. L. SHARP

FARNSWORTH, STEVENSON & CO.

Wool Merchants

Consignments Solicited

116-122 Federal Street

BOSTON

William Farnsworth

R. H. Stevenson, Jr.

E. W. Brigham

T. S. Conant

Jeremiah Williams & Co.

WOOL

Commission
Merchants

481 Summer Street, Boston, Mass.

Western Office, McIntyre Building, Salt Lake City, Utah

SALT LAKE STAMP CO.

PATENTEES AND MANUFACTURERS



and all kinds of

**STOCK-MARKING DEVICES
RIBBON AND METAL BADGES**PHONE 304 65 W. BROADWAY
SALT LAKE CITY, UTAH**American Rambouillet
Sheep Breeders' Ass'n**

Membership Fee \$10. No annual dues. Flock books free to members. Volume XVI ready for delivery and pedigrees now being received for Volume XVII. Over 77,000 sheep on record.

President—R. A. JACKSON,
Dayton, Washington.

Secretary—DWIGHT LINCOLN,
Milford Center, Ohio.

For history of the breed, list of members, rules, blanks, etc., address the Secretary.

**AMERICAN SHROPSHIRE
REGISTRY ASS'N.**

Organized 1884. 4750 Stockholders. Shares of Stock \$5.00. No Annual Dues. Volume XXIX Opened October 1, 1914. Printed Matter, Blanks, and Information FREE upon Application to the Secretary.

A. J. KNOLLIN, Pres., South Omaha, Neb.

J. M. WADE, Sec'y., LaFayette, Indiana

**American Hampshire
Sheep Ass'n**

Organized in 1889. Membership fee \$5.00. Pedigrees now being received for Vol. XII of the Flock Record. Write the Secretary for information and printed matter. A postal card will bring it. Write today.

F. J. HAGENBARTH, Pres.
Spencer, Idaho.

COMFORT TYLER, Secretary,
310 E. Chicago St., Coldwater, Mich.

It becomes increasingly evident that the year's supplies of crossbreds for army cloths is likely to prove inadequate. It is estimated that of the New Zealand clip about 320,000 bales have been sold and altogether about 450,000 bales have been already shipped from the Dominion. Last year's New Zealand shipments amounted to 540,000 bales.

Meanwhile Italy, Japan and Russia are all keenly interested in Merino wools.

H. DAWSON & CO.,
London, England.

A REAL AMERICAN FLEECE.

There has been on exhibition at Filene's Department Store this week a fleece of wool which was raised by Mr. Charles E. Crothers of Taylors-town, Pa. It was shorn from a Delaine ewe four years old on the 24th of February of this year and is eleven months' growth weighing 13½ pounds. At a recent tri-state fair in which competitors entered from Ohio, Pennsylvania and West Virginia, the clip from which this fleece was taken took the silver cup prize as being in all respects the best clip of Merino wool entering the competition and undoubtedly it is as choice a fleece of wool in every way as can be found today coming off a domestic American sheep. It compares very favorably with the best Australian wool and is superior to much of the wool coming from Australia.—Commercial Bulletin.

MACHINE OR HAND SHEARS.

In a letter from Nevada, the following question is asked: "Do you favor shearing with hand shears or with machine? Some sheepmen say that, after machines are used a few years, the sheep shear much less wool. What do you think about this?" Wherever the climate permits, shearing machines should be used. They do decidedly better work and more humane work than hand shares. Machine shorn wool is also more valuable than wool shorn with hand shears. On account of the machine taking the

fleece off more evenly, it naturally contains many less short fibres than in the case where hand shears are used.

The statement that the machine decreases the amount of wool is absurd. If they have any effect in changing the fleece, it is to increase the amount of wool. Naturally the machine cuts closer than the hand shears and sometimes the sheep sunburn a little after shearing. This is why some object to the machine. However, the sunburn does not prevent a growth of wool, but on the other hand it stimulates wool growth. Anything that irritates the skin moderately is inevitably followed by an increased growth of wool or hair. This is true whether it be the skin of the sheep or any other animal including man. Moderate irritation is followed by an increase of circulation to the part, and as wool or hair is entirely nourished by the blood carried to it, the greater the supply ordinarily, the greater will be the growth of wool. In fact the treatment for baldness whether in man or other animals is the application of moderate irritants to the skin.

Also the fact that machines cut closer than hand shears should of itself result in increased growth of wool for there is always a lot of short wool fibres that grow about so long and then stop, and the only way to encourage their further growth is to clip off the ends. When the hand shears are used, they do not reach these short fibres and hence they remain dormant. The machine shears, however, cut close enough to reach most of them, which stimulates their growth with the result that more wool is produced year after year.

It appears to the writer that when everything is considered the advantages all lie with the machine shears. These advantages may be summed up briefly as less injury to the sheep, more and better wool, and greater ease in removing the wool. This endorsement must not be taken to mean that we urge the use of machine shears in all parts of this country. Sometimes the climate is against their use, but the amount of such territory is very limited.